

SAFETY DATA SHEET

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

1.1 Product identifier

- Product Name: Preformed Thermoplastic Primer
- Contains n-butyl acetate

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

- Use of the substance/mixture: Thermoplastic road markings.
For industrial/professional use only.
- Use advised against: No information available

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Roadcraft Safety Products Ltd
- Address of Supplier: Unit 1, Knightcott Ind Estate
Banwell
North Somerset
BS29 6JN
UK
- Telephone: +44 (0)1934 825850
- Responsible Person: www.roadcraft.com
- Email: sales@roadcraft.com.com

1.4 Emergency telephone number

- Emergency Telephone: +44(0) 1934 825850
Hours of operation: 08.00 to 17.00 GMT

For medical advice or information contact your GP or dial 111 for 24-hour health advice (England – NHS 111, Scotland – NHS 24 111, Wales – NHS 111 Wales, Northern Ireland – NHS 111 Northern Ireland).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Flam. Liq. 3, H226; STOT SE 3, H336; EUH066
- Additional information: For full text of Hazard and EU Hazard statements: see section 16

2.2 Label elements



- Signal Word: Warning
- Hazard statements
H226 - Flammable liquid and vapour.
H336 - May cause drowsiness or dizziness.
- Precautionary statements
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing fume/vapours
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P312 - Call a POISON CENTRE or doctor if you feel unwell.
P403+P235 - Store in a well-ventilated place. Keep cool.

Revision: 25 July 2023

SECTION 2: Hazards identification (....)

P501 - Dispose of contents/container to an authorised waste collection point

- Supplemental Hazard information (EU)
EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1 Substances

- Not applicable

3.2 Mixtures

- Contains the following hazardous ingredients or ingredients with a workplace exposure limit:

Chemical Name	Conc.	CAS No.	EC No.	Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]	REACH Registration Number	SCL/ M-Factor/ ATE	WEL/ OEL
n-butyl acetate	≥ 60%	123-86-4	204-658-1	Flam. Liq. 3, H226; STOT SE 3, H336; EUH066	-	-	Yes

SECTION 4: First aid measures

No action shall be taken involving any personal risk or without suitable training

Rescuers should put on approved personal protective equipment (PPE) before administering first aid

4.1 Description of first aid measures

- Contact with eyes
If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes
Irrigate eyes thoroughly whilst lifting eyelids
Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
- Contact with skin
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of soap and water
Take off contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
- Ingestion
Rinse mouth.
Give plenty of water to drink
Never give anything by mouth to an unconscious person
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
- Inhalation
Remove person to fresh air and keep comfortable for breathing.
Keep warm and at rest, in a half upright position. Loosen clothing
Apply artificial respiration only if patient is not breathing but do not use mouth to mouth resuscitation
If breathing is difficult, oxygen should be given by a trained person
Get medical advice/attention.

Revision: 25 July 2023

SECTION 4: First aid measures (....)

4.2 Most important symptoms and effects, both acute and delayed

- Contact with eyes
May cause redness and irritation
- Contact with skin
May cause redness and irritation
Repeated exposure may cause skin dryness or cracking
- Ingestion
May cause gastro-intestinal irritation
May cause nausea/vomiting
- Inhalation
Vapours may cause drowsiness and dizziness
May cause headache

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: alcohol resistant foam; dry powder; carbon dioxide; water spray; water fog; sand/earth
- Unsuitable extinguishing media: high volume water jet

5.2 Special hazards arising from the substance or mixture

- Flammable liquid and vapour.
- In a fire or if heated, a pressure increase will occur and the container may burst
- May form explosive vapour/air mixtures
- Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback
- Gives off irritating or toxic fumes (or gases) in a fire.
- Decomposition products may include hydrocarbons
- Decomposition products may include carbon oxides

5.3 Advice for firefighters

- Evacuate the area and keep personnel upwind
 - Keep container(s) exposed to fire cool, by spraying with water
 - Collect contaminated fire extinguishing water separately. This MUST not be discharged into drains. Prevent fire extinguishing water from contaminating surface or ground water.
 - Special protective equipment: Wear self-contained breathing apparatus (SCBA). Wear full protective clothing including chemical protection suit.
-

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Rescuers should take suitable precautions to avoid becoming casualties themselves
- No action shall be taken involving any personal risk or without suitable training
- Personal precautions for non-emergency personnel: Avoid breathing vapours, mist or gas; Avoid contact with skin and eyes; Wear protective clothing as per section 8; Wash thoroughly after handling.
- Personal precautions for emergency responders: Evacuate the area and keep personnel upwind; Wear self-contained breathing apparatus (SCBA); Wear chemical protection suit; Butyl rubber or nitrile rubber are recommended; Wash thoroughly after dealing with spillage

SECTION 6: Accidental release measures (....)

6.2 Environmental precautions

- Do not allow to enter public sewers and watercourses
- If polluted water reaches drainage systems or water courses, immediately inform appropriate authorities

6.3 Methods and material for containment and cleaning up

- Stop leak if safe to do so.
- Do not allow to enter public sewers and watercourses
- Shut off all ignition sources
- Use non-sparking tools.
- Take action to prevent static discharges.
- Use explosion-proof electrical equipment.

- Small spills
 - Wipe up spillage with damp absorbent cloth or towel
 - Place in appropriate container
 - Remove contaminated material to safe location for subsequent disposal
 - Wash spill site with water and detergent
 - Wash thoroughly after dealing with spillage

- Large spills
 - Absorb spillage in suitable inert material
 - Place in appropriate container
 - Seal containers and label them
 - Remove contaminated material to safe location for subsequent disposal
 - To be disposed of as hazardous waste
 - Seek expert advice for removal and disposal of all contaminated materials and wastes
 - Wash thoroughly after dealing with spillage

6.4 Reference to other sections

- See section(s): 7, 8 & 13
-

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Ensure adequate ventilation
- Use local exhaust ventilation and/or enclosures.
- Use non-sparking handtools
- Use explosion-proof equipment.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Wear protective clothing as per section 8
- Use good personal hygiene practices
- Do not eat, drink or smoke when using this product.
- Wash thoroughly after handling.
- Take off contaminated clothing.
- Contaminated clothing should be laundered before reuse
- Eyewash bottles should be available

7.2 Conditions for safe storage, including any incompatibilities

- Store in a cool, dry well-ventilated place. Keep container tightly closed.
- Keep away from food, drink and animal feedingstuffs
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Keep in highly flammable materials store
- Incompatible with strong acids
- Keep away from alkalis (strong bases)
- Incompatible with strong oxidizing substances

Revision: 25 July 2023

SECTION 7: Handling and storage (....)

7.3 Specific end use(s)

A clear liquid tack coat primer designed for the adhesion of thermoplastic road markings onto non bituminous substrates.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- 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 monitoring standards, such as the following: European Standard EN 689 (Workplace exposure - Measurement of exposure by inhalation to chemical agents - Strategy for testing compliance with occupational exposure limit values). European Standard EN 14042 (Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents). European Standard EN 482 (Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- n-butyl acetate
 - (EU) OELV (long term TWA) 50 ppm 241 mg/m³
 - (EU) OELV (short term limit value) 150 ppm 723 mg/m³
 - WEL (long term) 150 ppm 724 mg/m³ (UK)
 - WEL (short term limit value) 200 ppm 966 mg/m³ (UK)
 - DNEL (inhalational) 48 mg/m³ Industry, Long Term, Systemic Effects
 - DNEL (inhalational) 600 mg/m³ Industry, Acute/Short Term, Systemic Effects
 - DNEL (inhalational) 300 mg/m³ Industry, Long Term, Local Effects
 - DNEL (inhalational) 600 mg/m³ Industry, Acute/Short Term, Local Effects
 - DNEL (dermal) 7 mg/kg (bw/day) Industry, Long Term, Systemic Effects
 - DNEL (dermal) 11 mg/kg (bw/day) Industry, Acute/Short Term, Systemic Effects
 - DNEL (inhalational) 12 mg/m³ Consumer, Long Term, Systemic Effects
 - DNEL (inhalational) 300 mg/m³ Consumer, Acute/Short Term, Systemic Effects
 - DNEL (inhalational) 35.7 mg/m³ Consumer, Long Term, Local Effects
 - DNEL (inhalational) 300 mg/m³ Consumer, Acute/Short Term, Local Effects
 - DNEL (dermal) 3.4 mg/kg (bw/day) Consumer, Long Term, Systemic Effects
 - DNEL (dermal) 6 mg/kg (bw/day) Consumer, Acute/Short Term, Systemic Effects
 - DNEL (oral) 2 mg/kg (bw/day) Consumer, Long Term, Systemic Effects
 - DNEL (oral) 2 mg/kg (bw/day) Consumer, Acute/Short Term, Systemic Effects
 - PNEC aqua (freshwater) 180 µg/L
 - PNEC aqua (intermittent releases, freshwater) 360 µg/L
 - PNEC aqua (marine water) 18 µg/L
 - PNEC (STP) 35.6 mg/L
 - PNEC sediment (freshwater) 981 µg/kg
 - PNEC sediment (marine water) 98.1 µg/kg
 - PNEC terrestrial (soil) 90.3 µg/kg

8.2 Exposure controls

- Selection and use of personal protective equipment should be based on a risk assessment of exposure potential
- Engineering controls
 - Engineering controls should be provided to prevent the need for ventilation
 - Use local exhaust ventilation and/or enclosures.
 - Use explosion-proof ventilating and lighting equipment.
- Respiratory protection
 - In case of insufficient ventilation, wear suitable respiratory equipment
 - Where a reusable half mask respirator is required, use EN 140, with gas/vapour filter EN 14387 type ABEK, or EN 405; EN 1827
 - Where a full face mask respirator is required, use EN 136, with gas/vapour filter EN 14387 type ABEK



Revision: 25 July 2023

SECTION 8: Exposure controls/personal protection (....)

- Skin protection
 - Wear suitable protective clothing
 - Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
 - The selection of a suitable glove depends on work conditions and whether the product is present on its own or in combination with other substances. Breakthrough time is dependent on the characteristics of the brand of glove used and the supplier should be consulted.
 - Butyl rubber or nitrile rubber are recommended
- Eye/face protection
 - Wear goggles giving complete eye protection approved to standard EN 166.
 - If risk of splashing, wear face-shield approved to standard EN 166 1B39N
 - Eyewash bottles should be available
- Hygiene measures
 - Do not eat, drink or smoke when using this product.
 - Contaminated clothing should be laundered before reuse
 - Use good personal hygiene practices
 - Wash thoroughly after handling.
- Environmental exposure controls
 - Avoid release to the environment.
 - Do not allow to penetrate the ground/soil.
 - Do not empty into drains


SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Clear and colourless liquid, semi-viscous
- Odour: Sweet-smelling
- Odour threshold: 7 - 20 ppm (n-butyl acetate)
- pH: Not applicable
- Melting point/freezing point: -90 °C (n-butyl acetate)
- Initial boiling point and boiling range: 126 °C (n-butyl acetate)
- Flashpoint: 27 °C (n-butyl acetate)
- Evaporation Rate: 1.0 (ether = 1) (n-butyl acetate)
- Flammability (solid,gas): No information available
- Upper/lower flammability or explosive limits: Lower explosive limit: (n-butyl acetate) 1.7 % (in air); Upper explosive limit: (n-butyl acetate) 7.6 % (in air)
- Vapour Pressure: 11.2 - 16 hPa @ 20 °C (n-butyl acetate)
- Vapour Density: 4 (n-butyl acetate)
- Relative Density: 0.879 - 0.881 @ 20 °C (n-butyl acetate)
- Solubility(ies): Solubility in water: 5.3 - 14 g/L @ 20 °C (n-butyl acetate)
- Partition Coefficient (n-Octanol/Water): 1.82 - 2.3 @ 25 °C (n-butyl acetate)
- Autoignition Temperature: 415 °C (n-butyl acetate)
- Decomposition temperature: No information available
- Viscosity: (Dynamic) 160 cP @ 20 °C
- Explosive Properties: Not applicable
- Oxidising Properties: Not applicable

9.2 Other information

Revision: 25 July 2023

SECTION 9: Physical and chemical properties (....)

- No information available
-

SECTION 10: Stability and reactivity

10.1 Reactivity

- Considered stable under normal conditions

10.2 Chemical stability

- Considered stable under normal conditions

10.3 Possibility of hazardous reactions

- Hazardous polymerisation will not occur under normal conditions of storage and use
- May form explosive vapour/air mixtures

10.4 Conditions to avoid

- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials

- Incompatible with strong acids
- Incompatible with alkalis (strong bases)
- Incompatible with strong oxidizing substances

10.6 Hazardous decomposition products

- Decomposition products may include hydrocarbons
 - Decomposition products may include carbon oxides
-

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute Toxicity

Based on available data, the classification criteria are not met

Substances

Chemical Name	LD50 (oral, rat)	LC50 (inhalation, rat)	LD50 (dermal, rabbit)
n-butyl acetate	10 768 mg/kg	390 ppm (4 h)	17 600 mg/kg

- Skin corrosion/irritation

Based on available data, the classification criteria are not met

- Serious eye damage/irritation

Based on available data, the classification criteria are not met

- Respiratory or skin sensitisation

Based on available data, the classification criteria are not met

- Germ cell mutagenicity

No evidence of mutagenic effects

- Carcinogenicity

None of the components of the product/mixture present at levels greater than or equal to 0.1% are listed by NTP, IARC, ACGIH or OSHA as a carcinogen.

- Reproductive toxicity

No evidence of reproductive effects



Revision: 25 July 2023

SECTION 11: Toxicological information (....)

Substances

Chemical Name	NOAEC (inhalation, rat)
n-butyl acetate	9 640 mg/m ³ (Effect on fertility) 7 230 mg/m ³ (Effect on developmental toxicity)

- Specific target organ toxicity (STOT) - single exposure
 - Has central nervous system effects
 - May cause drowsiness or dizziness.
 - Classification based on calculation and concentration thresholds
- Specific target organ toxicity (STOT) - repeated exposure
 - Based on available data, the classification criteria are not met

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
n-butyl acetate	196 mg/kg bw/day	2 400 mg/m ³ 500 ppm	No data available

- Aspiration hazard
 - Based on available data, the classification criteria are not met
- Contact with eyes
 - Causes redness and irritation
- Contact with skin
 - May cause redness and irritation
 - Repeated exposure may cause skin dryness or cracking.
- Ingestion
 - May cause gastro-intestinal irritation
 - May cause nausea/vomiting
- Inhalation
 - Vapours may cause drowsiness and dizziness
 - May cause headache

SECTION 12: Ecological information

12.1 Toxicity

- Based on available data, the classification criteria are not met

Substances

Chemical Name	LC50 (fish)	EC50 (aquatic invertebrates)	EC50 (aquatic algae)
n-butyl acetate	17 - 19 mg/L (4 days)	72.8 mg/L (24 h) 32 - 44 mg/L (48 h)	674.7 mg/L (72 h)

12.2 Persistence and degradability

- Volatile portion is biodegradable
- n-butyl acetate
 - Readily biodegradable (100%)

12.3 Bioaccumulative potential

- No information available
- n-butyl acetate
 - BCF: 15

Revision: 25 July 2023

SECTION 12: Ecological information (....)

12.4 Mobility in soil

- n-butyl acetate
Log Pow: 2.3
Will likely be mobile in the environment due to its volatility

12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII

12.6 Other adverse effects

- No information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Disposal should be in accordance with local, state or national legislation
- Dispose of contents/container to an authorised waste collection point
- This material and/or its container must be disposed of as hazardous waste
- Do not reuse empty containers without commercial cleaning or reconditioning
- Empty containers may contain flammable vapours
- Do not pierce or burn container, even after use
- Avoid release to the environment.

13.2 Classification

- The waste must be identified according to the List of Wastes (2000/532/EC)
- Hazardous Property Code(s): HP 3 Flammable; HP 5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
- EWC Code: 20 01 27* - paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transport information

14.1 UN number

- UN No.: 1866

14.2 Proper Shipping Name

- Proper Shipping Name: RESIN SOLUTION

14.3 Transport hazard class(es)

- Hazard Class: 3

14.4 Packing group

- Packing Group: III

14.5 Environmental hazards

- Not Classified

14.6 Special precautions for user

- No information available

SECTION 14: Transport information (....)

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

- Not applicable

14.8 Road/Rail (ADR/RID)

- ADR UN No.: 1866
- Proper Shipping Name: RESIN SOLUTION
- ADR Hazard Class: 3
- ADR Packing Group: III
- Tunnel Code: D/E

14.9 Sea (IMDG)

- IMDG UN No.: 1866
- Proper Shipping Name: RESIN SOLUTION
- IMDG Hazard Class: 3
- IMDG Pack Group.: III

14.10 Air (ICAO/IATA)

- ICAO UN No.: 1866
 - Proper Shipping Name: RESIN SOLUTION
 - ICAO Hazard Class: 3
 - ICAO Packing Group: III
-

SECTION 15: Regulatory information

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

- This safety data sheet is provided in compliance with REACH Regulation (EC) No 1907/2006 as amended by Regulation (EU) 2015/830
- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe
- This product is covered by EU Directive 2012/18/EU (the Seveso III Directive)
- Restrictions on use according to Annex XVII to REACH Regulation: N/A

15.2 Chemical safety assessment

- No information available
-

SECTION 16: Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Sources of data: Information from testing, published literature and supplier safety data sheets

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

- Flam. Liq. 3, H226: Classification based on bridging principles of similar tested mixtures
- STOT SE 3, H336: Classification based on calculation and concentration thresholds

Text not given with phrase codes where they are used elsewhere in this safety data sheet:

- H226: Flammable liquid and vapour
 - H336: May cause drowsiness or dizziness
-

SECTION 16: Other information (....)

- EUH066: Repeated exposure may cause skin dryness or cracking

Acronyms

- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstracts Service
- DNEL: Derived No-Effect Level
- EC: European Community
- EC50: Effective Concentration, 50%
- EL50: Effective Loading Rate resulting in 50% effect.
- GHS: Globally Harmonised System
- LC50: Lethal Concentration, 50%
- LD50: Lethal Dose, 50%
- LOAEC: Lowest observed adverse effect concentration
- LOAEL: Lowest Observed Adverse Effect Level
- NOAEC: No observed adverse effect concentration
- NOAEL: No observed adverse effect level
- OEL: Occupational Exposure Limit
- PBT: Persistent, Bioaccumulative and Toxic
- PNEC: Predicted No-Effect Concentration
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- SCL: Specific Concentration Limit
- STOT RE: Specific Target Organ Toxicity Repeated Exposure
- STOT SE: Specific Target Organ Toxicity Single Exposure
- SVHC: Substances of Very High Concern
- vPvB: very Persistent and very Bioaccumulative
- WEL: Workplace Exposure Limit

--- end of safety datasheet ---
