



## SAFETY DATA SHEET ARBOGRIP TF

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

#### 1.1. Product identifier

Product name                      ARBOGRIP TF

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

Identified uses                      Adhesive.

#### 1.3. Details of the supplier of the safety data sheet

Supplier                              Adshead Ratcliffe & Co. Ltd.  
Derby Road, Belper  
Derbyshire.  
DE56 1WJ  
Tel. (+44) 01773 826661  
Fax. (+44) 01773 821215  
sds@arbo.co.uk

#### 1.4. Emergency telephone number

Emergency telephone              (+44) 01773 826661 (office hours only)

### SECTION 2: Hazards identification

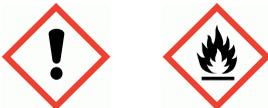
#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

Physical hazards                      Flam. Liq. 2 - H225  
Health hazards                        STOT SE 3 - H335, H336  
Environmental hazards              Aquatic Chronic 3 - H412

#### 2.2. Label elements

##### Pictogram



Signal word                              Danger

Hazard statements                      H225 Highly flammable liquid and vapour.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements              P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P280 Wear protective gloves.  
P261 Avoid breathing vapours.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P501 Dispose of contents/ container in accordance with national regulations.

# ARBOGRIP TF

**Contains** HYDROCARBONS C7 - C9, n-ALKANES, ISOALKANES, CYCLICS, BUTANONE

## 2.3. Other hazards

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<b>HYDROCARBONS C7 - C9, n-ALKANES, ISOALKANES, CYCLICS</b>	<b>10-30%</b>
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CAS number: —	EC number: 920-750-0
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#### Classification

Flam. Liq. 2 - H225  
 STOT SE 3 - H335, H336  
 Asp. Tox. 1 - H304  
 Aquatic Chronic 2 - H411

#### BUTANONE

**5-10%**

CAS number: 78-93-3	EC number: 201-159-0
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#### Classification

Flam. Liq. 2 - H225  
 Eye Irrit. 2 - H319  
 STOT SE 3 - H336

The full text for all hazard statements is displayed in Section 16.

**Composition comments** Adhesive based on synthetic rubbers and resins in highly flammable liquids.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	In all cases of doubt, or if symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
<b>Inhalation</b>	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Give plenty of water to drink. Give milk instead of water if readily available. DO NOT induce vomiting. Get medical attention immediately.
<b>Skin contact</b>	Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

<b>Inhalation</b>	Vapours may cause headache, fatigue, dizziness and nausea.
<b>Ingestion</b>	May cause stomach pain or vomiting.
<b>Skin contact</b>	Prolonged skin contact may cause redness and irritation.
<b>Eye contact</b>	May cause temporary eye irritation.

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

### SECTION 5: Firefighting measures

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### 5.1. Extinguishing media

**Suitable extinguishing media** Foam. Dry chemicals, sand, dolomite etc. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

### 5.2. Special hazards arising from the substance or mixture

**Specific hazards** Toxic gases or vapours. The product is highly flammable. Vapours may form explosive mixtures with air.

**Hazardous combustion products** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Avoid breathing fire gases or vapours. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses.

**Special protective equipment for firefighters** Wear self contained breathing apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear appropriate protective clothing. Follow precautions for safe handling described in this safety data sheet.

### 6.2. Environmental precautions

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Collect and place in suitable waste disposal containers and seal securely.

### 6.4. Reference to other sections

**Reference to other sections** Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See section 12. For waste disposal, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Avoid spilling. Avoid contact with skin and eyes. Keep away from heat, sparks and open flame. Avoid inhalation of vapours. Provide adequate ventilation.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Keep away from oxidising materials, heat and flames. Store in tightly-closed, original container in a dry, cool and well-ventilated place.

**Storage class** Flammable liquid storage.

### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

**Usage description** Gunnable sealant / adhesive.

## SECTION 8: Exposure Controls/personal protection

## ARBOGRIP TF

### 8.1. Control parameters

#### Occupational exposure limits

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Long-term exposure limit (8-hour TWA): WEL 200 ppm 600 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 300 ppm 899 mg/m<sup>3</sup>

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

#### HYDROCARBONS C7 - C9, n-ALKANES, ISOALKANES, CYCLICS

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 2035 mg/m <sup>3</sup>
	Workers - Dermal; Long term systemic effects: 773 mg/kg/day
	General population - Inhalation; Long term systemic effects: 608 mg/m <sup>3</sup>
	General population - Dermal; Long term systemic effects: 699 mg/kg/day
	General population - Oral; Long term systemic effects: 699 mg/kg/day

#### BUTANONE (CAS: 78-93-3)

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 600 mg/m <sup>3</sup>
	Workers - Dermal; Long term systemic effects: 1161 mg/kg/day
	General population - Inhalation; Long term systemic effects: 106 mg/m <sup>3</sup>
	General population - Dermal; Long term systemic effects: 412 mg/kg/day
<b>PNEC</b>	- Fresh water; 55.8 mg/l
	- Marine water; 55.8 mg/l
	- Intermittent release; 55.8 mg/l
	- STP; 709 mg/l
	- Sediment (Freshwater); 284.7 mg/kg
	- Sediment (Marinewater); 284.7 mg/kg
	- Soil; 22.5 mg/kg
	- Oral (food); 1000 mg/kg

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

#### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

#### Hand protection

Use protective gloves. Butyl rubber. Polyvinyl alcohol (PVA). The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

#### Hygiene measures

Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated.

#### Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Gas mask filter A in case of long or strong exposure.

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**Environmental exposure controls** Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

### SECTION 9: Physical and Chemical Properties

#### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Paste.
<b>Colour</b>	Buff.
<b>Odour</b>	Ketonic.
<b>Odour threshold</b>	Not applicable.
<b>pH</b>	Not applicable.
<b>Melting point</b>	Not applicable.
<b>Initial boiling point and range</b>	<35°C @ 1013.25 mbar
<b>Flash point</b>	< 23°C Not specified.
<b>Evaporation rate</b>	Not applicable.
<b>Evaporation factor</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	Not applicable.
<b>Vapour pressure</b>	Not applicable.
<b>Vapour density</b>	Not applicable.
<b>Relative density</b>	1.26
<b>Solubility(ies)</b>	Insoluble in water.
<b>Partition coefficient</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	Not determined.
<b>Explosive properties</b>	Heating may generate vapours which may form explosive mixtures with air.
<b>Oxidising properties</b>	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

#### 9.2. Other information

**Other information** Not known.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

#### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended.

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** No potentially hazardous reactions known.

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### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition.

### 10.5. Incompatible materials

**Materials to avoid** Strong oxidising agents. Strong reducing agents.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Toxicological effects** There are no data available on this product.

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** For this endpoint no toxicological data is available for the whole product.

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** For this endpoint no toxicological data is available for the whole product.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** For this endpoint no toxicological data is available for the whole product.

#### Skin corrosion/irritation

**Animal data** Based on available data the classification criteria are not met.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Based on available data the classification criteria are not met.

#### Respiratory sensitisation

**Respiratory sensitisation** Based on available data the classification criteria are not met.

#### Skin sensitisation

**Skin sensitisation** Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

**Genotoxicity - in vitro** Does not contain any substances known to be mutagenic.

#### Carcinogenicity

**Carcinogenicity** Does not contain any substances known to be carcinogenic.

#### Reproductive toxicity

**Reproductive toxicity - fertility** Does not contain any substances known to be toxic to reproduction.

#### Specific target organ toxicity - single exposure

**STOT - single exposure** Based on constituents classified as a specific target organ toxicant after single exposure. May cause drowsiness and dizziness. Respiratory irritation.

#### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

#### Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

#### Inhalation

Solvent vapours are hazardous and may cause nausea, fatigue, dizziness and headaches. There may be a feeling of tightness in the chest with shortness of breath.

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<b>Ingestion</b>	May cause discomfort if swallowed. May cause stomach pain or vomiting.
<b>Skin contact</b>	Prolonged skin contact may cause temporary irritation.
<b>Eye contact</b>	May cause temporary eye irritation.

### Toxicological information on ingredients.

#### HYDROCARBONS C7 - C9, n-ALKANES, ISOALKANES, CYCLICS

##### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** LD<sub>50</sub> >5000 mg/kg, Oral, Rat

##### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** LD<sub>50</sub> >2000 mg/kg, Dermal, Rabbit

##### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** LC<sub>50</sub> >23.3 mg/l/4hr/day, Inhalation, Rat

##### Skin corrosion/irritation

**Animal data** Irritating.

##### Serious eye damage/irritation

**Serious eye damage/irritation** Not irritating.

##### Skin sensitisation

**Skin sensitisation** Not sensitising.

##### Germ cell mutagenicity

**Genotoxicity - in vitro** Negative.

**Genotoxicity - in vivo** Negative.

##### Reproductive toxicity

**Reproductive toxicity - fertility** Two-generation study - NOAEL 9000 ppm, Inhalation, Rat F1 Read-across data.

**Reproductive toxicity - development** Maternal toxicity: - NOAEC: 1200 ppm, Inhalation, Rat Developmental toxicity: - NOAEC: 1200 ppm, Inhalation, Rat Teratogenicity: - NOAEC: 1200 ppm, Inhalation, Rat Read-across data.

##### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** NOAEC 5800 mg/m<sup>3</sup>, Inhalation, Rat

##### Aspiration hazard

**Aspiration hazard** Aspiration hazard if swallowed.

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##### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** LD<sub>50</sub> 3460 mg/kg, Oral, Rat

##### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** LD<sub>50</sub> > 10 mL/kg bw, Dermal, Rabbit

##### Skin corrosion/irritation

**Animal data** Not irritating.

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### Serious eye damage/irritation

**Serious eye damage/irritation** Irritating.

### Skin sensitisation

**Skin sensitisation** Buehler test - Guinea pig: Not sensitising.

### Germ cell mutagenicity

**Genotoxicity - in vitro** Negative.

**Genotoxicity - in vivo** Negative.

### Reproductive toxicity

**Reproductive toxicity - development** Maternal toxicity: - NOAEC: 1002 ppm, Inhalation, Rat Teratogenicity: - NOAEC: 1002 ppm, Inhalation, Rat

## SECTION 12: Ecological Information

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

### 12.1. Toxicity

**Toxicity** There are no data for the product.

### Ecological information on ingredients.

#### HYDROCARBONS C7 - C9, n-ALKANES, ISOALKANES, CYCLICS

<b>Acute toxicity - fish</b>	LL <sub>50</sub> , 96 hours: 3 - 10 mg/l, Onchorhynchus mykiss (Rainbow trout)
<b>Acute toxicity - aquatic invertebrates</b>	EL <sub>50</sub> , 48 hours: 4.6 - 10 mg/l, Daphnia magna
<b>Acute toxicity - aquatic plants</b>	EL <sub>50</sub> , 96 hours: 13 mg/l, Pseudokirchneriella subcapitata
<b>Acute toxicity - microorganisms</b>	EL <sub>50</sub> , 48 hours: 11.14 mg/l, Tetrahymena pyriformis NOELR, 48 hours: 2.494 mg/l, Tetrahymena pyriformis
<b>Chronic toxicity - fish early life stage</b>	NOELR, 28 days: 0.574 mg/l, Onchorhynchus mykiss (Rainbow trout)
<b>Chronic toxicity - aquatic invertebrates</b>	NOELR, 21 days: 1 mg/l, Daphnia magna

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<b>Acute toxicity - fish</b>	LC <sub>50</sub> , 96 hours: 2993 mg/l, Pimephales promelas (Fat-head Minnow)
<b>Acute toxicity - aquatic invertebrates</b>	EC <sub>50</sub> , 48 hours: 308 mg/l, Daphnia magna
<b>Acute toxicity - aquatic plants</b>	EC <sub>50</sub> , 48 hours: 1888 mg/l, Selenastrum capricornutum
<b>Acute toxicity - microorganisms</b>	TT (Toxicity threshold), 16 hours: 1150 mg/l, Pseudomonas putida

### 12.2. Persistence and degradability

**Persistence and degradability** There are no data on the degradability of this product.

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### Ecological information on ingredients.

#### HYDROCARBONS C7 - C9, n-ALKANES, ISOALKANES, CYCLICS

**Biodegradation** Expected to be readily biodegradable.

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**Biodegradation** The substance is readily biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** Not applicable.

### Ecological information on ingredients.

#### BUTANONE

**Partition coefficient** log Pow: 0.29

### 12.4. Mobility in soil

**Mobility** The product is insoluble in water.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### 12.6. Other adverse effects

**Other adverse effects** Not known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** Waste should be treated as controlled waste. When handling waste, the safety precautions applying to handling of the product should be considered.

**Disposal methods** Collect and place in suitable waste disposal containers and seal securely. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

**Waste class** HP3 Flammable HP5 STOT / Aspiration toxicity HP14 Ecotoxic Recommended EWC Code 08 04 09\*

## SECTION 14: Transport information

### 14.1. UN number

**UN No. (ADR/RID)** 1133

**UN No. (IMDG)** 1133

**UN No. (ICAO)** 1133

**UN No. (ADN)** 1133

### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** ADHESIVES

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Proper shipping name (IMDG) ADHESIVES

Proper shipping name (ICAO) ADHESIVES

Proper shipping name (ADN) ADHESIVES

### 14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

Transport labels



### 14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ADN packing group	II
ICAO packing group	II

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

### 14.6. Special precautions for user

EmS	F-E, S-D
ADR transport category	2
Emergency Action Code	•3YE
Hazard Identification Number (ADR/RID)	33
Tunnel restriction code	(D/E)

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

## SECTION 15: Regulatory information

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

**EU legislation** Regulation (EC) 1907/2006 REACH (as amended).  
Regulation (EC) 1272/2008 CLP (as amended).

**Guidance** Workplace Exposure Limits EH40.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## ARBOGRIP TF

### SECTION 16: Other information

<b>Revision comments</b>	General review
<b>Revision date</b>	05/05/2017
<b>Revision</b>	1
<b>Supersedes date</b>	14/10/2015
<b>SDS number</b>	10372
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.