

**Automotive****SAFETY DATA SHEET****RING TYRE REPAIR**

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

**Product name** RING TYRE REPAIR  
**Internal identification** A0414  
**UFI** UFI: KF41-W0RR-600N-K6KT

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

**Identified uses** Emergency tyre inflator  
**Uses advised against** Use only for intended applications.

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

**Supplier** Ring Automotive Limited  
Volvox House  
Gelderd Road  
Leeds  
LS12 6NA  
+44(0)113 213 2000  
+44(0)113 231 0266  
autosales@ringautomotive.co.uk  
  
OSRAM GmbH  
Nonnendammallee 44  
13629 Berlin  
Germany  
+49 30 33 86 0  
automotive-service@osram.com

**1.4. Emergency telephone number**

**Emergency telephone** +44 (0) 113 213 2000 (9:00 - 17:00)

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification (SI 2019 No. 720)**

**Physical hazards** Aerosol 2 - H223, H229  
**Health hazards** Not Classified  
**Environmental hazards** Not Classified

**2.2. Label elements**

## RING TYRE REPAIR

### Hazard pictograms



### Signal word

Warning

### Hazard statements

EUH208 Contains Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT). May produce an allergic reaction.

H223 Flammable aerosol.

H229 Pressurised container: may burst if heated.

### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

P501 Dispose of contents/ container in accordance with national regulations.

### UFI

UFI: KF41-W0RR-600N-K6KT

### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Petroleum gases, liquefied

30-60%

CAS number: 68476-85-7

EC number: 270-704-2

#### Classification

Flam. Gas 1A - H220

Press. Gas (Liq.) - H280

#### Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT)

&lt;1%

CAS number: 55965-84-9

M factor (Acute) = 100

M factor (Chronic) = 100

#### Classification

Acute Tox. 3 - H301

Acute Tox. 3 - H311

Acute Tox. 3 - H331

Skin Corr. 1C - H314

Eye Dam. 1 - H318

Skin Sens. 1A - H317

Aquatic Acute 1 - H400

Aquatic Chronic 1 - H410

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## RING TYRE REPAIR

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	Show this Safety Data Sheet to the medical personnel. If medical advice is needed, have product container or label at hand.
<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.
<b>Skin contact</b>	Rinse immediately with plenty of water. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. 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>	Gastrointestinal symptoms, including upset stomach.
<b>Skin contact</b>	May cause skin sensitisation or allergic reactions in sensitive individuals.
<b>Eye contact</b>	May cause discomfort.

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

<b>Notes for the doctor</b>	Treat symptomatically.
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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.
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#### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards</b>	Flammable aerosol. Pressurised container: may burst if heated
<b>Hazardous combustion products</b>	Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ).

#### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	Cool containers exposed to flames with water until well after the fire is out.
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### SECTION 6: Accidental release measures

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

<b>Personal precautions</b>	Ensure procedures and training for emergency decontamination and disposal are in place. No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Evacuate area. No smoking, sparks, flames or other sources of ignition near spillage. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid contact with skin, eyes and clothing. Provide adequate ventilation. Avoid inhalation of vapours. Take care as floors and other surfaces may become slippery. Avoid contact with contaminated tools and objects. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Do not touch or walk into spilled material. Wash thoroughly after dealing with a spillage. If ventilation is inadequate, suitable respiratory protection must be worn. Take precautionary measures against static discharges. Do not handle broken packages without protective equipment.
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## RING TYRE REPAIR

### 6.2. Environmental precautions

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground.

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

**Methods for cleaning up** Eliminate all ignition sources if safe to do so. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Provide adequate ventilation. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Clean contaminated objects and areas thoroughly, observing environmental regulations. Wash thoroughly after dealing with a spillage.

### 6.4. Reference to other sections

**Reference to other sections** Wear protective clothing as described in Section 8 of this safety data sheet.

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

**Usage precautions** Observe any occupational exposure limits for the product or ingredients. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Eliminate all sources of ignition. Do not spray on an open flame or other ignition source. Do not expose to temperatures exceeding 50°C/122°F. Provide adequate ventilation. Avoid breathing vapour/spray. Use only outdoors or in a well-ventilated area. Do not pierce or burn, even after use. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling.

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

**Storage precautions** Store at temperatures between 4°C and 40°C. Do not expose to temperatures exceeding 50°C/122°F. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Storage class** Flammable compressed gas storage.

### 7.3. Specific end use(s)

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

## **SECTION 8: Exposure controls/Personal protection**

### 8.1. Control parameters

#### Occupational exposure limits

##### **Petroleum gases, liquefied**

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit.

### 8.2. Exposure controls

#### **Protective equipment**



**Appropriate engineering controls**

Observe any occupational exposure limits for the product or ingredients.

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<b>Eye/face protection</b>	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment that provides appropriate eye and face protection should be worn. The following protection should be worn: Tight-fitting safety glasses.
<b>Hand protection</b>	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. 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. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. The selected gloves should have a breakthrough time of at least 4 hours. The breakthrough time for any glove material may be different for different glove manufacturers. When used with mixtures, the protection time of gloves cannot be accurately estimated. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Protective gloves should have a minimum thickness of 0.15 mm. Glove thickness is not necessarily a good measure of glove resistance as the permeation rate will depend on the exact glove composition. The choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Repeated exposure to chemicals will degrade the ability of the glove to provide resistance to chemicals. Specific work environments and material handling practices may vary, therefore safety procedures should be developed for each intended application. Gloves made from the following material may provide suitable chemical protection: Nitrile rubber. Rubber (natural, latex). Neoprene.
<b>Hygiene measures</b>	Wash hands thoroughly after handling. Wash contaminated clothing before reuse.
<b>Respiratory protection</b>	No specific requirements are anticipated under normal conditions of use. Disposable filtering half mask respirators suitable for intended use should be used. Ensure all respiratory protective equipment is suitable for its intended use and is 'UKCA'-marked. Gas and combination filter cartridges suitable for intended use should be used. Half mask and quarter mask respirators with replaceable filter cartridges suitable for intended use should be used. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P2. Dust and mist filter.
<b>Environmental exposure controls</b>	Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. Store in a demarcated bunded area to prevent release to drains and/or watercourses.

### SECTION 9: Physical and chemical properties

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

<b>Appearance</b>	Aerosol.
<b>Colour</b>	White.
<b>Odour</b>	Hydrocarbons.
<b>pH</b>	pH (concentrated solution): ~ 7.5
<b>Melting point</b>	Not determined.
<b>Initial boiling point and range</b>	Not determined.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not determined.
<b>Flammability (solid, gas)</b>	Not applicable.

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Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not determined.
Vapour pressure	Not determined.
Relative density	Not applicable.
Solubility(ies)	Dispersible in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not applicable.
Explosive properties	There are no chemical groups present in the product that are associated with explosive properties.
Oxidising properties	Does not meet the criteria for classification as oxidising.
Comments	Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures.

### 9.2. Other information

Other information	Not determined.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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### 10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not determined.
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### 10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition.
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### 10.5. Incompatible materials

Materials to avoid	Flammable/combustible materials.
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### 10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ).
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

Notes (oral LD <sub>50</sub> )	Based on available data the classification criteria are not met.
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#### Acute toxicity - dermal

Notes (dermal LD <sub>50</sub> )	Based on available data the classification criteria are not met.
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#### Acute toxicity - inhalation

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<b>Notes (inhalation LC<sub>50</sub>)</b>	Based on available data the classification criteria are not met.
<b><u>Skin corrosion/irritation</u></b>	
<b>Skin corrosion/irritation</b>	Based on available data the classification criteria are not met.
<b><u>Serious eye damage/irritation</u></b>	
<b>Serious eye damage/irritation</b>	Based on available data the classification criteria are not met.
<b><u>Respiratory sensitisation</u></b>	
<b>Respiratory sensitisation</b>	Based on available data the classification criteria are not met.
<b><u>Skin sensitisation</u></b>	
<b>Skin sensitisation</b>	Based on available data the classification criteria are not met. May cause sensitisation or allergic reactions in sensitive individuals.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Does not contain any substances known to be mutagenic.
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	Does not contain any substances known to be carcinogenic.
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	Does not contain any substances known to be toxic to reproduction.
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>STOT - single exposure</b>	Based on available data the classification criteria are not met.
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>STOT - repeated exposure</b>	Based on available data the classification criteria are not met.
<b><u>Aspiration hazard</u></b>	
<b>Aspiration hazard</b>	Not anticipated to present an aspiration hazard, based on chemical structure.
<b><u>Inhalation</u></b>	Vapours may cause headache, fatigue, dizziness and nausea.
<b><u>Ingestion</u></b>	Gastrointestinal symptoms, including upset stomach.
<b><u>Skin contact</u></b>	May cause an allergic skin reaction.
<b><u>Eye contact</u></b>	May cause discomfort.
<b><u>Acute and chronic health hazards</u></b>	Defatting, drying and cracking of skin.
<b><u>Route of exposure</u></b>	Dermal Inhalation
<b><u>Target organs</u></b>	Central nervous system Skin
<b><u>Medical symptoms</u></b>	Allergies. Dry skin.
<b><u>Medical considerations</u></b>	Skin disorders and allergies.

### Toxicological information on ingredients.

#### Petroleum gases, liquefied

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 21.6

Species Rat

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ATE inhalation (vapours mg/l) 21.6

Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT)

Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 53.0

Species Rat

Notes (oral LD<sub>50</sub>) Estimated value.

ATE oral (mg/kg) 53.0

Acute toxicity - dermal

ATE dermal (mg/kg) 300.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 3.0

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.

### SECTION 12: Ecological information

Ecotoxicity Not regarded as dangerous for the environment.

#### 12.1. Toxicity

##### Acute aquatic toxicity

Acute toxicity - fish Not determined.

##### Chronic aquatic toxicity

Chronic toxicity - fish early life stage Not determined.

#### Ecological information on ingredients.

Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT)

Acute aquatic toxicity

LE(C)<sub>50</sub> 0.001 < L(E)C<sub>50</sub> ≤ 0.01

M factor (Acute) 100

Acute toxicity - fish Estimated value.  
LC<sub>50</sub>, 96 hours: 13 mg/l, Fish

Chronic aquatic toxicity

NOEC 0.0001 < NOEC ≤ 0.001

Degradability Non-rapidly degradable

M factor (Chronic) 100

#### 12.2. Persistence and degradability



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**Persistence and degradability** The product is expected to be biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** The product does not contain any substances expected to be bioaccumulating.

**Partition coefficient** Not determined.

### 12.4. Mobility in soil

**Mobility** The product is soluble 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 determined.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal methods** Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

## SECTION 14: Transport information

**General** For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

### **Special Provisions note**

#### 14.1. UN number

**UN No. (ADR/RID)** 1950

**UN No. (IMDG)** 1950

**UN No. (ICAO)** 1950

#### 14.2. UN proper shipping name

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

**Proper shipping name (IMDG)** AEROSOLS

**Proper shipping name (ICAO)** AEROSOLS

#### 14.3. Transport hazard class(es)

**ADR/RID class** 2.1

**ADR/RID classification code** 5F

**ADR/RID label** 2.1

**IMDG class** 2.1

**ICAO class/division** 2.1

## RING TYRE REPAIR

### Transport labels



### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

### 14.6. Special precautions for user

EmS F-D, S-U

ADR transport category 2

Tunnel restriction code (D)

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78  
and the IBC Code

## SECTION 15: Regulatory information

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

National regulations Control of Substances Hazardous to Health Regulations 2002 (as amended).

Guidance Workplace Exposure Limits EH40.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

**Abbreviations and acronyms used in the safety data sheet**

ATE: Acute Toxicity Estimate.  
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
CAS: Chemical Abstracts Service.  
IMDG: International Maritime Dangerous Goods.  
LC50: Lethal Concentration to 50 % of a test population.  
LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).  
NOEC: No Observed Effect Concentration.  
PBT: Persistent, Bioaccumulative and Toxic substance.  
REACH: The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577.  
UN: United Nations.  
vPvB: Very Persistent and Very Bioaccumulative.

## RING TYRE REPAIR

<b>Classification abbreviations and acronyms</b>	Acute Tox. = Acute toxicity Aerosol = Aerosol Aquatic Acute = Hazardous to the aquatic environment (acute) Aquatic Chronic = Hazardous to the aquatic environment (chronic) Eye Dam. = Serious eye damage Flam. Gas = Flammable gas Press. Gas (Liq.) = Gas under pressure: Liquefied gas Skin Corr. = Skin corrosion Skin Sens. = Skin sensitisation
<b>Classification procedures according to SI 2019 No. 720</b>	Aerosol 2 - H223, H229: Bridging principle (Aerosols)., Expert judgement., On basis of test data. EUH208: Calculation method.
<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	09/11/2021
<b>Revision</b>	6.1
<b>Supersedes date</b>	06/09/2019
<b>SDS number</b>	31068
<b>Hazard statements in full</b>	H220 Extremely flammable gas. H223 Flammable aerosol. H229 Pressurised container: may burst if heated. H280 Contains gas under pressure; may explode if heated. H301 Toxic if swallowed. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H331 Toxic if inhaled. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. EUH208 Contains Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT). May produce an allergic reaction.

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.