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

1.1 Product identifier

Trade name: **BATTERY TERMINAL PROTECTOR**

Article number: **R204**

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

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
TYGRIS Industrial
Unit 31, Kyle Road Industrial Estate
Irvine
Ayrshire
KA12 8LE
Tel +44 (0) 1294 311 066
Email technical@tygrisindustrial.com

Further information obtainable from: Technical Department

1.4 Emergency telephone number: Tel +44 (0) 1294 311 066

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Physical hazards: Flam. Aerosol 1 - H222

Human health hazards: EUH066

2.2. Label elements

Hazard statements: H222: Extremely flammable aerosol.

Hazard pictograms: GHS02: Flame



Signal word: Danger

Precautionary statements:
P102: Keep out of reach of children.
P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P211: Do not spray on an open flame or other ignition source.
P251: Pressurized container: Do not pierce or burn, even after use.
P261: Avoid breathing vapour/spray.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves.
P410+412: Protect from sunlight. Do not expose to temperatures exceeding 50° C/122°F.
P501: Dispose of contents/container in accordance with local regulations.

Supplementary precautionary statements: P273: Avoid release to the environment.

Supplemental label information: EUH066: Repeated exposure may cause skin dryness or cracking. H229: Pressurised container: May burst if heated

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

ODOURLESS KEROSENE

EC	CAS	Index number	CLP Classification	Percent
926-141-6	64742-47-8	-	EUH066 Asp. Tox. 1 - H304	30-60%

BUTANE

203-448-7	106-97-8	-	Flam. Gas 1 - H220	5-10%

ISOBUTANE

200-857-2	75-28-5	-	Flam. Gas 1 - H220	1-5%

1-METHOXY-2-PROPANOL

203-539-1	107-98-2	-	Flam. Liq. 3 - H226 STOT SE 3 - H336	1-5%

SODIUM NITRITE

231-555-9	7632-00-0	-	Ox. Sol. 3 - H272 Acute Tox. 3 - H301 Aquatic Acute 1 - H400	< 1%

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Skin contact: Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

Eye contact: Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Ingestion: DO NOT INDUCE VOMITING! Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Get medical attention if any discomfort continues.

Inhalation: Move the exposed person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep the affected person warm and at rest. Get prompt medical attention.

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

General information: NOTE! Effects may be delayed. Keep affected person under observation.

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media: Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Aerosol cans may explode in a fire.

5.3. Advice for fire-fighters

Special fire fighting procedures: Containers close to fire should be removed or cooled with water. Use water to keep fire exposed containers cool and disperse vapours.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.2. Environmental precautions

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Wear necessary protective equipment. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Let evaporate. Keep out of confined spaces because of explosion risk. If leakage cannot be stopped, evacuate area.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling requirements: Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C.

7.3. Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits:

BUTANE

Long-term exposure limit (8-hour TWA)	Short-term exposure limit (15-minute)
WEL 600 ppm, 1450 mg/m³	WEL 750 ppm, 1810 mg/m³

1-METHOXY-2-PROPANOL

WEL 100 ppm (Sk), 375 mg/m³	WEL 150 ppm (Sk), 560 mg/m³

ODOURLESS KEROSENE

165 ppm, 1200 mg/m³	-

WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment:



Engineering measures: Provide adequate general and local exhaust ventilation.

General protective and hygienic measures: DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Respiratory protection: No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Use chemical cartridge protection with appropriate cartridge.

Hand protection: Use protective gloves.

Eye protection: Wear approved chemical safety goggles where eye exposure is reasonably probable.

Other Protection: Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Aerosol

Colour: Orange

Odour: Characteristic

Solubility: Insoluble in water

Flammability limits: Lower: 0.8 % Upper: 9.0 %

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Chemical stability: Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid: Avoid heat, flames and other sources of ignition. Avoid contact with: Strong oxidising agents. Strong alkalis. Strong mineral acids.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2).

SECTION 11. Toxicological Information

11.1. Information on toxicological effects

Skin contact: Prolonged or repeated exposure may cause severe irritation. Acts as a defatting agent on skin. May cause cracking of skin, and eczema.

Eye contact: Irritating to eyes. May cause chemical eye burns.

Inhalation: May cause irritation to the respiratory system. Vapours may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system.

Ingestion: May cause discomfort if swallowed. May cause stomach pain or vomiting. Gastrointestinal symptoms, including upset stomach.

Route of entry: Inhalation. Skin and/or eye contact.

SECTION 12. Ecological information

12.1. Toxicity

Ecotoxicity: Dangerous for the environment if discharged into watercourses.

12.2. Persistence and degradability

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

General information: Empty containers must not be burned because of explosion hazard. Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: Transport Information

UN Number (ADR): 1950

UN Number (IMDG): 1950

UN Number (IATA): 1950

14.2 UN proper shipping name

Proper shipping name: AEROSOLS

14.3. Transport hazard class(es)

ADR/RID/ADN Class: 2, Class 2: Gases

ADR Label No. 2.1

IMDG Class: 2.1

ICAO Class/Division: 2.1

Transport labels:



14.4. Packing group

Packing group: Not applicable.

14.5 Environmental hazards

Marine pollutant: No

14.6 Special precautions for user

EmS: F-D, S-U

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

Statutory Instruments: The Aerosol Dispensers (Amendment) Regulations 2014 No.1130.

Guidance Notes: Workplace Exposure Limits EH40.
Introduction to Local Exhaust Ventilation HS(G)37.

EU Legislation: The Aerosol Dispensers Directive 1975/324 EEC.
Regulation (EC) No.1272/2008: The Classification, Labelling and Packaging of substances and mixtures Regulations.
Regulation (EC) No. 1907/2006: The Registration, Evaluation, Authorisation and Restriction of Chemicals Regulations (REACH).
2001/95/EC The General Product Safety Directive (GPSD).
Commission Regulation (EU) 2015/830: Requirements for the compilation of safety data sheets (amending REACH).
Authorisations (Title VII Regulation 1907/2006): No specific authorisations are noted for this product.
Restrictions (Title VIII Regulation 1907/2006): No specific restrictions of use are noted for this product.

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

SECTION 16: Other Information

Other information:	This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.
Phrases used in s.2 and s.3:	EUH066: Repeated exposure may cause skin dryness or cracking. H220: Extremely flammable gas. H222: Extremely flammable aerosol. H226: Flammable liquid and vapour. H272: May intensify fire; oxidiser. H301: Toxic if swallowed. H304: May be fatal if swallowed and enters airways. H336: May cause drowsiness or dizziness. H400: Very toxic to aquatic life.
Legal disclaimer	The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.