

**HOLDFAST® GORILLA® NAILPOWER FR  
MATERIAL SAFETY DATA SHEET**

**Product Code:** 20169 (Foam Trade 750ml)

**Product Name:** Gorilla Nailpower FR DIY Expanding Foam 750ml

**Identification of Product**

*Use:* Polyurethane.



**Hazardous Ingredients**

|                                     | CAS - Nr              | Conc. In % | Symbol | R-phrases             |
|-------------------------------------|-----------------------|------------|--------|-----------------------|
| Polymethylene polyphenyl isocyanate | 9016-87-9             | 30-60      | Xn     | 20-36/37/38-42/43 (i) |
| Halogenated polyetherpolyol         | 86675-46-9            | 1-10       | Xn     | 22 (i)                |
| Norflurance                         | 811-97-2<br>212-377-0 | 1-10       |        |                       |
| Dimethyl ether                      | 115-10-6<br>204-065-8 | 1-10       | F+     | 12 (i)                |
| Isobutane                           | 75-28-5<br>200-857-2  | 1-10       | F+     | 12 (i)                |

**Hazardous Identification:**

- Extremely flammable
- Harmful by inhalation
- Irritating to eye, respiratory system and skin
- May cause sensitization by inhalation and skin contact

**Physical Description/Properties**

|                                 |                  |
|---------------------------------|------------------|
| <i>Appearance (at 20°C):</i>    | Aerosol          |
| <i>Odour:</i>                   | Characteristic   |
| <i>Colour:</i>                  | Variable         |
| <i>Water solubility:</i>        | Insoluble        |
| <i>Soluble in:</i>              | Organic solvents |
| <i>Relative vapour density:</i> | >1               |

**First Aid**

*Swallowed:* Never give water to an unconscious person. Do not induce vomiting. See medical advice.

*Eye Contact:* Rinse immediately with plenty of water. Seek medical advice.

*Skin Absorption:* Rinse immediately with plenty of water. If irritation persists: seek medical advice.

*Inhalation:* Remove the victim into fresh air. Seek medical advice.

**Personal Protection Information**

*Exposure limit values:*

Polymethylene Polyphenyl Isocyanate:  
MEL-LTEL: 0.02 (-NCO) mg/m<sup>3</sup>  
MEL-STEL: 0.07 (-NCO)

|             |                        |          |
|-------------|------------------------|----------|
| Norflurane: |                        |          |
| OES-LTEL:   | 4240 mg/m <sup>3</sup> | 1000 ppm |
| MAK:        | 4200 mg/m <sup>3</sup> | 1000 ppm |
| MAC-TGG 8h: | 4200 mg/m <sup>3</sup> |          |

|                 |                        |          |
|-----------------|------------------------|----------|
| Dimethyl Ether: |                        |          |
| OES-LTEL:       | 766 mg/m <sup>3</sup>  | 400 ppm  |
| OES-STEL:       | 958 mg/m <sup>3</sup>  | 500 ppm  |
| MAK:            | 1900 mg/m <sup>3</sup> | 1000 ppm |
| MAC-TGG 8h:     | 950 mg/m <sup>3</sup>  |          |
| MAC-TGG 15min:  | 150 mg/m <sup>3</sup>  |          |
| GWBB 8h:        | 1920 mg/m <sup>3</sup> | 1000 ppm |
| EC:             | 1920 mg/m <sup>3</sup> | 1000 ppm |

|          |                        |          |
|----------|------------------------|----------|
| Propane: |                        |          |
| MAK:     | 1800 mg/m <sup>3</sup> | 1000 ppm |

|            |                        |          |
|------------|------------------------|----------|
| Isobutane: | 2400 mg/m <sup>3</sup> | 1000 ppm |
|------------|------------------------|----------|

*Occupational exposure controls:* Use only in well ventilated area.

*Respiratory protection:* In case of insufficient ventilation: respiratory protection with filtertype A.

*Hand protection:* Chemically resistant gloves.

*Eye protection:* Safety glasses.

*Skin protection:* Suitable protective clothing.

### Safe Storage and Handling

*Handling:* Observe very strict hygiene – avoid contact. Use spark- /explosion proof appliances and lighting system. Remove contaminated clothing immediately. Clean contaminated clothing.

*Storage:* Keep out of direct sunlight. Store in a cool area. Store in a dry area. Ventilation at floor level. Keep away from: heat sources, ignition sources, acids, bases.

*Temperature:* < 50°C.

*Storage life:* 365 days.

*Packaging:* Suitable: aerosol dispenser.

### Fire & Explosion Data

*Fire Extinguishing Media:* Quantities of water, polyvalent foam, BC powder, carbon dioxide.

*Special exposure hazards:* Gas/vapour spreads at floor level: ignition hazard. Gas/vapour flammable with air within explosion limits. On heating: release of toxic/combustible gases/vapours: hydrogen cyanide. Aerosol may explode under the effect of heat.

*Instructions:* Cool closed containers with water if they are exposed to the fire. Dilute toxic gases with water spray. Do not move the load if exposed to heat.

*Special proactive equipment:* Heat/fire exposure: compressed air/oxygen apparatus. Protective clothing for exposure to chemicals.

### Accidental Release Measures

*Environmental precautions:* Use appropriate containment to avoid environmental contamination.

*Clean up:* Allow product to solidify and remove it by mechanical means. Remove uncured foam with acetone.

### Reactivity Data

*Conditions to Avoid:* Unstable on exposure to heat.

*Materials to Avoid:* Keep away from: heat sources, ignition sources, acids, bases.

*Hazardous Decomposition:* On heating: release of toxic/combustible gases/vapours: hydrogen cyanide. May polymerize on exposure to temperature rise. On burning: release of toxic and corrosive gases/vapours: phosphorus oxides, nitrous vapours, hydrogen chloride, hydrofluoric acid, carbon monoxide, carbon dioxide and formation of small quantities of hydrobromic acid. Polymerizes with many compounds e.g.

(strong) bases and amines. Reacts violently with (some) acids/bases.

### Health Hazard/Toxicological Properties Overexposure Effects

#### Acute Toxicity:

Polymethylene Polyphenyl Isocyanate:

LD50 oral rat: >10000 mg/kg

LD50 dermal rabbit: > 5000 mg/kg

Norflurane:

LC50 inhalation rat: > 2000 mg/1/4 h

LC50 inhalation rat: > 500000 ppm/4 h

Dimethyl Ether:

LC50 inhalation rat: 309 mg/1/4 h

LC50 inhalation rat: 163991 ppm/4 h

Propane:

LC50 inhalation rat: 513 mg/1/4 h

LC50 inhalation rat: 280000 ppm/4 h

Isobutane:

LC50 inhalation rat: > 50 mg/1/4 h

#### Chronic Toxicity:

Norflurane:

Teratogenicity (MAK): Group C.

Dimethyl Ether: Inhalation, eyes and skin.

#### Acute effects:

*Inhalation:* Dry/sore throat, coughing, irritation of the respiratory tract, irritation of the nasal mucous membranes, runny nose.

*May occur later:* Inflammation of the respiratory tract, risk of lung oedema, respiratory difficulties.

*Skin:* Tingling/irritation of the skin.

*Eye:* Irritation of the eye tissue. Lacrimation.

#### Chronic effects:

May cause sensitization by skin contact. May cause sensitization by inhalation. Contains substance of group C (MAK-Schwangerschaftsgruppe) (norflurane). Not listed in mutagenicity class (EC, MAK).

*On continuous exposure:* Body temperature rise, tremor, feeling of weakness, headache, skin rash/inflammation, may stain the skin, dry skin, risk of pneumonia.

### Ecological Information

*Mobility:* Volatile organic compounds (VOC): 23% 189g/litre.  
Insoluble in water.

*Other effects:* WGK: (Classification in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS of 17 May 1999).

*Ozone layer:* Not dangerous to the ozone layer (1999/45/EC).

### Regulatory Information

Labelling in accordance with directives 67/548/EEC and 1999/45/EC.

*Contains:* Polymethylene Polyphenyl Isocyanate.

R20: Harmful by inhalation.

R36/37/38: Irritating to eyes, respiratory system and skin.

R42/43: May cause sensitization by inhalation and skin contact.

S23: Do not breathe spray.

S36/37/39: Wear suitable protective clothing gloves, and eye/face protection.

S38: In case of insufficient ventilation, wear respiratory equipment.

S45: In case of accident or if you feel unwell, seek medical advice (show the label where possible).

Contains isocyanates. See information supplied by the manufacturer.

Keep away from sources of ignition – no smoking.

Keep out of reach of children.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C.

Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

### Transport Information

*Classification of the substance in compliance with UN Recommendations:*

UN Number: 1950

Class: 2.1

*ADR (Transport by road)*

Class: 2

Classification: 5 F

Danger label: 2.1

*RID (Transport by rail)*

Class: 2

Classification: 5 F

Danger label: 2.1

*ADNR (transport by inland waterways)*

Class: 2

Classification: 5 F

Danger label: 2.1

*IMDG (maritime transport)*

Class: 2.1

EMS: F-D, S-U

*ICAO (air transport)*

Class: 2.1

Packing instructions passenger aircraft: 203/Y203

Packing instructions cargo aircraft: 203

*Limited quantities:*

When substances and their packaging meet the conditions established by ADR/RID/ADNR in chapter 3.4, only the following prescriptions shall be complied with: each package shall display a diamond-shaped figure with the following inscription – UN 1950, or in the case of different goods with different identification numbers within a single package the letters 'LQ'.

### Disposal Considerations

*Provisions relating to waste:* Waste material codes (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001) : 08 05 01\* (waste isocyanates).  
Hazardous Waste (91/689/EEC)

*Disposal methods:* Specific treatment. Do not discharge into drains or the environment.

*Packaging:* Waste material code packaging (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001) : 15 01 10\* (packaging containing residues of or contaminated by dangerous substances)

### Health and Safety Recommendation

– Apply the usual industrial hygiene