

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Revision date: 6/02/2023

NAVULLING

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: NAVULLING

Article number: Z900140

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

Relevant identified uses: Refilling the flamewarp.

Uses advised against: Any non-intended use.

1.3 Details of the supplier of the safety data sheet

Company: MULTITASK INDUSTRIES
KARNEMELKSTRAAT 12
9060 ZELZATE / BELGIUM
TEL : +32 (0)9 282 43 61
FAX : +32 (0)9 337 04 96
HOMEPAGE: www.multitaskindustries.be
EMAIL: info@multitaskindustries.be

Information department:

Technical information: info@multitaskindustries.be

1.4 Emergency telephone number: Poison control centre (Brussels): +32 (0)70 245 245.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to Regulation (EC) No 1272/2008

Hazard categories:

Aerosol: Aerosol 1.

Hazard statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

2.2 Label elements

According to Regulation (EC) No 1272/2008

Pictograms of danger:



GHS02

Signal word: Danger

Hazard statements:

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

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Precautionary statements:

- 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 to local/regional/national/international regulations.

Labeling of packages with a total content not exceeding 125 ml

Signal word: Danger

Pictograms of danger:



GHS02

Hazard statements: H222 – H229

Precautionary statements: P102 – P210 – P211 – P251 – P410 – P412

2.3 Other hazards

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components:

Name	Product identifier	Quantity	GHS classification
Butane	CAS No: 106-97-8 EC No: 203-448-7 Index No: 601-004-00-0	>50%	Flam. Gas 1, Compressed gas; H220 H280
Propane	CAS No: 74-98-6 EC No: 200-827-9 Index No: 601-003-00-5	20 – 50%	Flam. Gas 1, Compressed gas; H220 H280
Isobutane	CAS No: 75-28-5 EC No: 200-857-2 Index No: 601-004-00-0	<1%	Flam. Gas 1, Compressed gas; H220 H280

Full text of H and EUH statements: see section 16.

Further information: Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH).

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4. FIRST AID MEASURES

4.1 Description of first aid measures

General information: In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin: After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, seek medical treatment.

After contact with eyes: Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist

After ingestion: If swallowed, immediately drink: Water. Never give anything by mouth to an unconscious person or a person with cramps. Do NOT induce vomiting. Caution if victim vomits: Risk of aspiration! Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Foam. Carbon dioxide. Extinguishing powder.

Unsuitable extinguishing media: High power water jet.

5.2 Special hazards arising from the substance or mixture

Combustible. Vapours may form explosive mixtures with air. Can be released in case of fire: Carbon dioxide (CO₂). Carbon monoxide.

5.3 Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information: Use water spray jet to protect personnel and to cool endangered containers.

Suppress gases/vapours/mists with water spray jet. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains. In case of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ventilate affected area. Remove all sources of ignition. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Wear personal protection equipment (refer to section 8). Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

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6.2 Environmental precautions

Do not allow to enter into surface water or drains. Explosion hazard. Eliminate leaks immediately. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4 Reference to other sections

Safe handling: see section 7.

Disposal: see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling: Use only in well-ventilated areas. Take precautionary measures against static discharges. Do not spray on naked flames or any incandescent material. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion: Keep away from sources of ignition. - No smoking. Heating causes rise in pressure with risk of bursting.

Further information on handling: General protection and hygiene measures: refer to chapter 8

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels: Keep container tightly closed in a cool, well-ventilated place. Keep away from sources of ignition. - No smoking. Provide adequate ventilation.

Hints on joint storage: Do not store together with: Explosives. Flammable solids. Pyrophoric liquids and solids. Self-heating substances and mixtures. Substances and mixtures which, in contact with water, emit flammable gases. Oxidizing liquids. Oxidizing solids. Self-reactive substances and mixtures. Organic peroxides. Radioactive substances. Infectious substances.

Further information on storage conditions: Recommended storage temperature: 10-30°C. Do not store at temperatures over: 50°C. Note: Storage requirements for flammable aerosols.

7.3 Specific end use(s)

See section 1.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits:

Name	CAS No	ml/m ³	mg/m ³	Category	Origin
n-Butane	106-97-8	600	1430	TGG 8 hours	Private

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8.2 Exposure controls



Appropriate engineering controls: If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Protective and hygiene measures: Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

Eye/face protection: Wear safety glasses; chemical goggles (if splashing is possible).

Hand protection: In case of prolonged or frequently repeated skin contact: Wear suitable gloves.

Suitable material:

Butyl rubber. (0,5 mm)

Breakthrough time >480 min

penetration time (maximum wearing period): >160 min

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Check leak tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection: Protective clothing. Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Respiratory protection: With correct and proper use, and under normal conditions, breathing protection is not required. Respiratory protection necessary at: exceeding exposure limit values, insufficient ventilation.

Suitable respiratory protective equipment: Protective respiration apparatus not using surrounding air (breathing apparatus) (DIN EN 133). Use only respiratory protection equipment with CE-symbol including four-digit test number.

Environmental exposure controls: Do not allow uncontrolled discharge of product into the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state: Aerosol.

Colour: Not determined.

Odour: Characteristic.

pH-Value: Not determined.

Melting point: Not determined.

Initial boiling point and boiling range: Not determined.

Sublimation point: Not determined.

Softening point: Not determined.

Flash point: <21 °C

Flammability (gas): Not determined.

Explosive properties: In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

Lower explosion limits: Not determined.

Upper explosion limits: Not determined.

Ignition temperature: Not determined.

Auto-ignition temperature (gas): Not determined.

Decomposition temperature: Not determined.

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Oxidizing properties:	None.
Vapour pressure:	Not determined.
Density:	Not determined.
Water solubility:	Not determined.
Solubility in other solvents:	Not determined.
Viscosity dynamic:	Not determined.
Viscosity kinematic:	Not determined.
Flow time:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solvent separation test:	Not determined.
Solvent content:	Not determined.

9.2 Other information

Solid content: Not determined.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3 Possibility of hazardous reactions

Refer to chapter 10.5.

10.4 Conditions to avoid

Keep away from heat. Ignition hazard. Heating causes rise in pressure with risk of bursting.

10.5 Incompatible materials

Oxidizing agents, strong.

10.6 Hazardous decomposition products

In use, may form flammable/explosive vapour-air mixture. Can be released in case of fire: Carbon dioxide (CO₂). Carbon monoxide

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Toxicokinetic, metabolism and distribution: No information available.

Acute toxicity: Based on available data, the classification criteria are not met.

Chemical name	CAS No	Exposure route	Dose	Species	Source
Propane	74-98-6	Inhalation gas	LC50 800000 (15 min) ppm	Rat	ECHA file
Isobutane	75-28-5	Inhalation gas	LC50 520400 (120 min) ppm	Mouse	ECHA file

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Irritation and corrosivity: Based on available data, the classification criteria are not met.

Sensitising effects: Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

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

Specific effects in experiment on animal: No information available.

Endocrine disrupting properties: This product does not contain substances (>0.1%) with endocrine disrupting properties to non-target organisms as no ingredient meets the criteria.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

The product has not been tested.

12.2 Persistence and degradability

The product has not been tested.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water:

CAS No	Chemical name	Log Pow
106-97-8	Butane	2,89
74-98-6	Propane	2,36
75-28-5	Isobutane	2,8

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Endocrine disrupting properties

This product does not contain substances (>0.1%) with endocrine disrupting properties for non-target organisms as no ingredient meets the criteria. The above statement applies to the substances in the product above 0.1%.

12.7 Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Advice on disposal: Waste disposal according to national or regional legislation. Uncontaminated and completely empty packaging can be reused. The allocation of the waste key numbers/waste markings must be industry and process specific in accordance with AVV.

Recommendation list for waste key/waste designations according to EAKV:

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Waste disposal number of waste from residues/unused products:

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste.

Waste disposal number of used product:

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste.

Waste disposal number of contaminated packaging:

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste.

Contaminated packaging: Handle contaminated packages in the same way as the substance itself.

14. TRANSPORT INFORMATION

14.1 UN number

ADR: UN 1950

IMDG: UN 1950

ICAO-TI/IATA-DGR: UN 1950

ADN: UN 1950

RID: UN 1950

14.2 UN proper shipping name

ADR: AEROSOLS

IMDG: AEROSOLS

ICAO-TI/IATA-DGR: AEROSOLS, flammable

ADN: AEROSOLS

RID: AEROSOLS

14.3 Transport hazard classes

ADR: 2

IMDG: 2.1

ICAO-TI/IATA-DGR: 2.1

ADN: 2

RID: 2

14.4 Packing group

ADR:

Hazard label: 2.1



Classification code: 5F

Special Provisions: 190, 327, 344, 625

Limited quantity: 1 L

Excepted quantity: E0

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Transport category: 2
Tunnel restriction code: D

IMDG:

Hazard label: 2.1



Marine pollutant: No.
Special Provisions: 63, 190, 277, 327, 344, 381, 959
Limited quantity: 1000 mL
Excepted quantity: E0
EmS: F-D, S-U

ICAO-TI/IATA-DGR:

Hazard label: 2.1



Special Provisions: A145, A167, A802
Limited quantity Passenger: 30 kg G
Passenger: /
Passenger LQ: Y203
Excepted quantity: E0
IATA-packing instructions - Passenger: 203
IATA-max. quantity - Passenger: 75 kg
IATA-packing instructions - Cargo: 203
IATA-max. quantity - Cargo: 150 kg

ADN:

Hazard label: 2.1



Classification code: 5F
Special Provisions: 190, 327, 344, 625
Limited quantity: 1 L
Excepted quantity: E0

RID:

Hazard label: 2.1



Classification code: 5F
Special Provisions: 190, 327, 344, 625
Limited quantity: 1 L
Excepted quantity: E0
Transport category: 2
Tunnel restriction code: D

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14.5 Environmental hazards

Environmentally hazardous: No.

14.6 Special precautions for user

Refer to section 6-8.

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

Not applicable.

15. REGULATORY INFORMATION

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

EU regulatory information:

Restrictions on use (REACH, annex XVII): Entry 29: butane; isobutane.

2010/75/EU (VOC): 100 %

2004/42/EC (VOC): Not determined.

Information according to 2012/18/EU (SEVESO III): P3a FLAMMABLE AEROSOLS.

Additional information:

Aerosol directive (75/324/EEC)

REACH 1907/2006 Appendix XVII, No (mixture): 3, 40

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

National regulatory information:

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D): Not water contaminating.

15.2 Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out: /

16. OTHER INFORMATION

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route.

AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen.

CAS Chemical Abstracts Service.

DNEL: Derived No Effect Level.

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany).

LOAEL: Lowest observed adverse effect level.

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LOAEC: Lowest observed adverse effect concentration.
LC50: Lethal concentration, 50 percent.
LD50: Lethal dose, 50 percent.
NOAEL: No observed adverse effect level.
NOAEC: No observed adverse effect level.
NTP: National Toxicology Program.
N/A: not applicable.
OSHA: Occupational Safety and Health Administration.
PNEC: predicted no effect concentration.
PBT: Persistent bioaccumulative toxic.
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail).
SARA: Superfund Amendments and Reauthorization Act.
SVHC: substance of very high concern.
TRGS Technische Regeln fuer Gefahrstoffe.
TSCA: Toxic Substances Control Act.
VOC: Volatile Organic Compounds.
VwVwS: Verwaltungsvorschrift wassergefahrdender Stoffe.
WGK: Wassergefahrdungsklasse.

Relevant H and EUH statements:

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H280 Contains gas under pressure; may explode if heated.

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]:

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data.

Further information:

Classification: - Procedure of classification.
Health hazards: Calculation method.
Environmental hazards: Calculation method.
Physical hazards: On basis of test data and / or calculated and / or estimated.

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