SmokeCheck 25S (Smoke Alarm Tester)

Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations
Issue date: 22/04/2024 Supersedes: 22/04/2024 Version: 2.0

SECTION 1: Product identifier

1.1. GHS Product identifier

Product form : Mixture
Trade name : SmokeCheck 25S (Smoke Alarm Tester)
Product code : Not available

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Smoke alarm tester

1.4. Details of manufacturer or importer

Supplier
HSI Fire and Safety Group, LLC
1424 Armour Blvd
Mundelein, IL 60060
U.S.A.
T +1 (847) 427-8340 - F +1 (847) 427-8343
hsi@hsifiresafety.com

Distributor
HSI Fire and Safety Group, LLC
Unit # 1281
3-1750 The Queensway
Etobicoke, ON M9C 5H5

1.5. Emergency phone number

Emergency number : CHEMTREC 1 (703) 527-3887

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Aerosol, Category 1 H222;H229

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU) :

Flame

Signal word (GHS AU) : Danger
Hazard statements (GHS AU) : H222 - Extremely flammable aerosol
H229 - Pressurised container: May burst if heated
Precautionary statements (GHS AU) : 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.
P403 - Store in a well-ventilated place.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Unknown acute toxicity (GHS AU) : 2% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Gas))

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : Contact with the liquefied gas may cause frostbite.

SECTION 3: Composition and information on ingredients

Name	CAS-No.	%
Isobutane	75-28-5	45 - 70
Propane	74-98-6	30 - 60
n-Butane	106-97-8	0.5 - 1.5
Non-hazardous or chemicals not contributing to final classification	Proprietary	To 100%

SECTION 4: First aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : If skin irritation occurs: Obtain medical attention if irritation persists. Thaw frosted parts with lukewarm water. Do not rub affected area.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Thaw frosted parts with lukewarm water. Do not rub affected area.

First-aid measures after ingestion : Not a normal route of exposure. If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Symptoms caused by exposure

Symptoms/effects after inhalation : May cause respiratory tract irritation. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Symptoms/effects after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause frostbite on contact with the liquefied gas.

Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. May cause frostbite on contact with the liquefied gas.

Symptoms/effects after ingestion : Not a normal route of exposure. May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Medical attention and special treatment

Other medical advice or treatment : Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Foam. Dry chemical.

Unsuitable extinguishing media : Do not use carbon dioxide. Do not use water jet.

5.2. Specific hazards arising from the chemical

Fire hazard : Extremely flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon. Oxides of nitrogen. Oxides of sulfur.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate every possible source of ignition. Use only non-sparking tools. Use special care to avoid static electric charges.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Cool closed containers exposed to fire with water spray.

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Vapours may be heavier than air and may travel along the ground to a distant ignition source and flash back.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate every possible source of ignition. Use only non-sparking tools. Use special care to avoid static electric charges.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and materials for containment and cleaning up

For containment : Stop leak if safe to do so. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Hazardous waste due to potential risk of explosion.

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Use only non-sparking tools. Avoid contact with skin and eyes. Do not swallow. Avoid breathing dust/fume/gas/mist/vapours/spray. When using do not eat, drink or smoke. Handle and open container with care.

Hygiene measures : Wash contaminated clothing before reuse. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Keep in fireproof place. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store away from direct sunlight or other heat sources. Store in a well-ventilated place.

Incompatible materials : Refer to Section 10 on Incompatible Materials.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

Isobutane (75-28-5)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Isobutane
ACGIH OEL STEL	1000 ppm (EX - Explosion hazard)

Isobutane (75-28-5)	
Remark (ACGIH)	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2021

Propane (74-98-6)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Propane
Remark (ACGIH)	TLV® Basis: Simple Asphyxiant
ACGIH chemical category	Simple asphyxiant See Appendix F: Minimal Oxygen Content
Regulatory reference	ACGIH 2024

n-Butane (106-97-8)	
Australia - Occupational Exposure Limits	
OES TWA	1900 mg/m³
OES TWA	800 ppm
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL STEL	1000 ppm (explosion hazard (Butane, isomers)

8.2. Biological Monitoring

No additional information available

8.3. Engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.4. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Wear suitable gloves. VITON gloves. Insulating gloves
Eye protection : Safety glasses or goggles are recommended when using product.
Skin and body protection : Wear suitable protective clothing
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. SDSs cannot provide detailed and complete respiratory protection guidelines. Selection of respiratory protection must be done by a qualified person who has assessed the work environment.
Thermal hazard protection : Use personal protective equipment as required.
Environmental exposure controls : Avoid release to the environment.
Other information : Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

Physical state : Gas
Appearance : Aerosol.
Colour : Colourless
Odour : Slightly ethereal
Odour threshold : No data available
pH : No data available
pH solution : No data available
Relative evaporation rate (butylacetate=1) : No data available
Relative evaporation rate (ether=1) : > 1
Melting point / Freezing point : Melting point: < -75 °C (< -99 °F)
Boiling point : -32 – 0 °C (-25 - 32 °F)
Flash point : < -75 °C (< -99 °F)
Auto-ignition temperature : > 462 °C (> 863 °F)
Flammability : No data available

Vapour pressure	:	Vapour pressure: 4.41 bar @ 21 °C (70 °F), 64 psig; 11.8 bar @ 54 °C (129 °F), 178 psig
Relative density	:	Relative vapour density at 20°C: 1.79 @ 21 °C (70 °F)
Density	:	Relative density: 0.538 @ 21 °C (70 °F)
Solubility	:	Water: 0.008 % @ 21 °C (70 °F)
Partition coefficient n-octanol/water	:	1.35
Viscosity, dynamic	:	< 0.6 cP @ 21 °C (70 °F)
Explosive properties	:	No data available
Explosive limits	:	1.9 – 8.4 vol % @ 25 °C (77 °F)
Minimum ignition energy	:	No data available
VOC content	:	< 99 %
Fat solubility	:	No data available

SECTION 10: Stability and reactivity

Reactivity	:	No dangerous reactions known under normal conditions of use.
Chemical stability	:	Stable under normal storage conditions. Extremely flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Extreme risk of explosion by shock, friction, fire or other sources of ignition.
Possibility of hazardous reactions	:	No dangerous reactions known under normal conditions of use.
Conditions to avoid	:	Heat. Incompatible materials. Sources of ignition. Direct sunlight. Moisture. Sparks. Open flame. Overheating.
Incompatible materials	:	Acids. Strong oxidizing agents.
Hazardous decomposition products	:	May include, and are not limited to: oxides of carbon. Oxides of nitrogen. Oxides of sulfur.

SECTION 11: Toxicological information

Acute toxicity (oral)	:	Not classified.
Acute toxicity (dermal)	:	Not classified.
Acute toxicity (inhalation)	:	Not classified.

Isobutane (75-28-5)	
LC50 inhalation rat	> 800000 ppm (Exposure time: 15 min Source: ECHA_API)

Propane (74-98-6)	
LC50 inhalation rat	> 800000 ppm (Exposure time: 15 min Source: ECHA_API)

n-Butane (106-97-8)	
LC50 inhalation rat	658 g/m³ (Exposure time: 4 h Source: NLM_CIP)

Unknown acute toxicity (GHS AU)	:	2% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Gas))
Skin corrosion/irritation	:	Not classified.
Serious eye damage/irritation	:	Not classified.
Respiratory or skin sensitisation	:	Not classified.
Germ cell mutagenicity	:	Not classified.
Carcinogenicity	:	Not classified.
Reproductive toxicity	:	Not classified.
STOT-single exposure	:	Not classified.
STOT-repeated exposure	:	Not classified.
Aspiration hazard	:	Not applicable

SmokeCheck 25S (Smoke Alarm Tester)	
Vaporizer	Aerosol

Isobutane (75-28-5)	
Animal studies and expert judgment for classification	False

Propane (74-98-6)	
Animal studies and expert judgment for classification	False

n-Butane (106-97-8)	
Animal studies and expert judgment for classification	False

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye

SECTION 12: Ecological information

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

12.1. Ecotoxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.
Hazardous to the aquatic environment, short–term (acute) : Not classified.
Hazardous to the aquatic environment, long–term (chronic) : Not classified.
Other information : No other effects known.

Isobutane (75-28-5)	
BCF - Fish [1]	1.57 – 1.97
Partition coefficient n-octanol/water	1.09 – 2.8 (at 20 °C (at pH 7)

Propane (74-98-6)	
Partition coefficient n-octanol/water	1.09 (at 20 °C (at pH 7)

n-Butane (106-97-8)	
Partition coefficient n-octanol/water	2.31 (at 20 °C (at pH 7)

12.2. Persistence and degradability

SmokeCheck 25S (Smoke Alarm Tester)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

SmokeCheck 25S (Smoke Alarm Tester)	
Partition coefficient n-octanol/water	1.35
Bioaccumulative potential	Not established.

Isobutane (75-28-5)	
BCF - Fish [1]	1.57 – 1.97
Partition coefficient n-octanol/water	1.09 – 2.8 (at 20 °C (at pH 7)

Propane (74-98-6)	
Partition coefficient n-octanol/water	1.09 (at 20 °C (at pH 7)

n-Butane (106-97-8)	
Partition coefficient n-octanol/water	2.31 (at 20 °C (at pH 7)

12.4. Mobility in soil

SmokeCheck 25S (Smoke Alarm Tester)	
Partition coefficient n-octanol/water	1.35

Isobutane (75-28-5)	
Partition coefficient n-octanol/water	1.09 – 2.8 (at 20 °C (at pH 7)

Propane (74-98-6)	
Partition coefficient n-octanol/water	1.09 (at 20 °C (at pH 7)

n-Butane (106-97-8)	
Partition coefficient n-octanol/water	2.31 (at 20 °C (at pH 7)

12.5. Other adverse effects

Ozone : Not classified.
Other adverse effects : No additional information available

SmokeCheck 25S (Smoke Alarm Tester)	
Fluorinated greenhouse gases	False

Isobutane (75-28-5)	
Fluorinated greenhouse gases	False

Propane (74-98-6)	
Fluorinated greenhouse gases	False

n-Butane (106-97-8)	
Fluorinated greenhouse gases	False

SECTION 13: Disposal considerations

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Container under pressure. Do not drill or burn even after use.
Additional information : Flammable vapours may accumulate in the container. Hazardous waste due to potential risk of explosion.

SECTION 14: Transport information

14.1. UN number

UN-No. (ADG) : 1950
UN-No. (IMDG) : 1950
UN-No. (IATA) : 1950

14.2. UN Proper Shipping Name

Proper Shipping Name (ADG) : AEROSOLS
Proper Shipping Name (IMDG) : AEROSOLS, flammable
Proper Shipping Name (IATA) : Aerosols, flammable

14.3. Transport hazard class(es)

ADG
Transport hazard class(es) (ADG) : 2.1
Danger labels (ADG) : 2.1
:

IMDG
Transport hazard class(es) (IMDG) : 2.1
Danger labels (IMDG) : 2.1

:

IATA

Transport hazard class(es) (IATA) : 2.1
Danger labels (IATA) : 2.1
:

14.4. Packing group

Packing group (ADG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Marine pollutant : No
Dangerous for the environment : No
Other information : No supplementary information available.

14.6. Special precautions for user

Specific storage requirement : No data available
Shock sensitivity : No data available

14.7. Additional information

Other information : No supplementary information available.
Special transport precautions : Do not handle until all safety precautions have been read and understood.

Transport by road and rail

UN-No. (ADG) : 1950
Special provision (ADG) : 63, 190, 277, 327, 344, 381
Limited quantities (ADG) : 1l
Excepted quantities (ADG) : E0
Packing instructions (ADG) : P207, LP200
Special packing provisions (ADG) : PP87, L2

Transport by sea

UN-No. (IMDG) : 1950

Air transport

UN-No. (IATA) : 1950

14.8. Hazchem or Emergency Action Code

Hazchem Code : 2YE

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

15.2. International agreements

No additional information available

SECTION 16: Other information

Indication of changes:
SDS update.

Expiry date : 22/04/2029
Other information : None.
Prepared by : Nexreg Compliance Inc.
www.Nexreg.com

Classification	
Aerosol 1	H222;H229

Full text of H-statements	
Aerosol 1	Aerosol, Category 1
Flam. Gas 1	Flammable gases, Category 1
Press. Gas (Comp.)	Gases under pressure : Compressed gas
H220	Extremely flammable gas
H280	Contains gas under pressure; may explode if heated

Safety Data Sheet (SDS), Australia - Nexreg 2022