

QUICK START ENGINE STARTER

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

| | |
|---------------|----------------------------|
| Chemical Name | Mixture |
| CAS No. | Mixture |
| Trade Name | QUICK START ENGINE STARTER |
| Product Code | SGES1 |

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

| | |
|----------------------|----------------|
| Identified Use(s) | Starting Fluid |
| Uses Advised Against | None |

| | |
|------------------------|---|
| Company Identification | Silverhook Ltd. Bates Road, Harold Wood RM3 0JH. UK |
|------------------------|---|

| | |
|-----------|--|
| Telephone | +44 (0)1708330500 |
| Fax | +44 (0)1708330504 |
| E-Mail | 333@silverhook.co.uk |

Emergency telephone number

| | |
|---------------------|---------------------------------------|
| Emergency Phone No. | +44(0)1708330500 (usual office hours) |
|---------------------|---------------------------------------|

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)

Flam. Gas 1; Liquefied gas; Skin Irrit. 2; Carc. 2; Repr. 2; STOT SE 3

Label elements

Hazard Symbol



DANGER

Signal word(s)

Hazard Statement(s)

Extremely flammable gas.
Contains gas under pressure; may explode if heated.
Causes skin irritation.
Suspected of causing cancer.
Suspected of damaging the unborn child.
May cause drowsiness or dizziness.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash hands and exposed skin after use.
Use only outdoors or in a well-ventilated area.
Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F.
Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

Precautionary Statement(s)

QUICK START ENGINE STARTER

Eliminate all ignition sources if safe to do so.

Other hazards

Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Ingredient(s) | % wt. * | CAS No. | Hazard classification |
|---------------------------------------|---------|------------|---|
| Diethyl Ether | 55 - 65 | 60-29-7 | Flam. Liq. 1; H224 Acute Tox. 4; H302 STOT SE 3; H336 |
| Naptha (petroleum) hydrotreated light | 20 - 30 | 64742-49-0 | Flam. Liq. 2; H225 Skin Irrit. 2; H315 Asp. Tox. 1; H304 STOT SE 3; H336 Aquatic Acute 2; H401 Aquatic Chronic 2; H11 |
| Carbon Dioxide | 10 - 15 | 124-38-9 | Compressed dissolved gas; H280 |
| Ethanol | <5 | 64-17-5 | Flam. Liq. 2; H225 Eye Irrit. 2; H319 |
| Chloroethane | < 2 | 75-00-3 | Flam. Gas 1; H220 Carc. 2; H351 |
| Petroleum Distillate | < 1 | Mixture | Asp. Tox. 1; H304 |
| Toluene | < 0.5 | 108-88-3 | Flam. Liq. 2; H225 Repr. 2; H361 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Asp. Tox. 1; H304 STOT SE 3; H336 STOT RE 2; H373 Aquatic Acute 2; H401 Aquatic Chronic 3; H412 |

Additional Information – None

* The exact percentage withheld as a trade secret in accordance with 29 CFR 1910.1200.

SECTION 4: FIRST AID MEASURES

Description of first aid measures

Inhalation

Move person to fresh air. If breathing is labored, administer oxygen. If symptoms develop, obtain medical attention.

Skin Contact

Wash affected skin with soap and water. If irritation (redness, rash, blistering) develops, get medical attention. Take off contaminated clothing and wash it before reuse.

Eye Contact

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.

Ingestion

Do not induce vomiting. Do not give anything by mouth to an unconscious person. Get immediate medical attention.

Most important symptoms and effects, both acute and delayed

May cause drowsiness or dizziness.

Indication of any immediate medical attention and special treatment needed

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

QUICK START ENGINE STARTER

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

-Suitable Extinguishing Media

Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Keep containers cool by spraying with water if exposed to fire.

-Unsuitable Extinguishing Media

Do not use water jet.

Special hazards arising from the substance or mixture

Contains gas under pressure; may explode if heated.

Advice for fire-fighters

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Eliminate sources of ignition. Avoid contact with skin and eyes. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing gas / vapours.

Environmental precautions

Prevent liquid entering sewers, basements and work pits. Avoid release to the environment.

Methods and material for containment and cleaning up

Cover spills with inert absorbent material. Collect spillage. Transfer to a container for disposal or recovery.

Reference to other sections

None

Additional Information

None

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with skin and eyes. Avoid breathing gas / vapours. Use product in a well-ventilated area only.

Conditions for safe storage, including any incompatibilities

-Storage temperature

Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F. Keep container tightly closed. Store locked up.

-Incompatible materials

This product should be stored away from sources of strong heat or oxidizing chemicals.

Specific end use(s)

Starting Fluid

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

| SUBSTANCE. | CAS No. | (8hr TWA) | | (STEL) | | Note: |
|-----------------|----------|------------|------------------------|------------|-------------|------------------|
| | | PEL (OSHA) | TLV (ACGIH) | PEL (OSHA) | TLV (ACGIH) | |
| Alkanes (C5-C6) | ----- | 500 ppm** | 1500 mg/m ³ | ----- | ----- | **n-heptane |
| Diethyl ether | 60-29-7 | 400 ppm | 400 ppm | ----- | 500 ppm | ----- |
| Chloroethane | 75-00-3 | 1000 ppm | 100 ppm* | ----- | ----- | *A3 |
| Carbon dioxide | 124-38-9 | 5000 ppm | 5000 ppm | ----- | 30,000 ppm | ----- |
| Toluene | 108-88-3 | 200 ppm | 20 ppm | 300 ppm* | ----- | *10-min. Ceiling |

#Assure minimum oxygen content of work atmosphere. *A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans

QUICK START ENGINE STARTER

Recommended monitoring method

NIOSH 1500 (hydrocarbons, B.P. 36 - 126 °C); NIOSH 1610 (Ethyl ether); NIOSH 2519 (Ethyl chloride); NIOSH 1501 (Aromatic hydrocarbons)

Exposure controls

Appropriate engineering controls

Provide adequate ventilation to ensure that the occupational exposure limit is not exceeded.

Personal protection equipment

Eye/face protection

Wear protective eyewear (goggles, face shield, or safety glasses).



Skin protection (Hand protection/ Other)

Wear suitable gloves if prolonged skin contact is likely. Check with protective equipment manufacturer's data.



Respiratory protection

Normally no personal respiratory protection is necessary. In case of insufficient ventilation, wear suitable respiratory equipment. Check with protective equipment manufacturer's data.



Thermal hazards

Not normally required. Use gloves with insulation for thermal protection, when needed.

Environmental Exposure Controls

Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Gas under pressure

Color.

Colorless

Odor

Sweetish, Hydrocarbon-like

Odor Threshold (ppm)

Not available

pH (Value)

Not available

Melting Point (°C) / Freezing Point (°C)

Not available

Boiling point/boiling range (°C):

34 - 35 (Diethylether)

Flash Point (°C)

-45 (Diethylether)

Evaporation Rate

Not available

Flammability (solid, gas)

Extremely flammable

Explosive Limit Ranges

1.85% - 36.5% v/v (Diethylether)

Vapor pressure (Pascal)

7.16×10^4 (Diethylether)

Vapor Density (Air=1)

Not available

Density (g/ml)

Not available

Solubility (Water)

Not available

Solubility (Other)

Not available

Partition Coefficient (n-Octanol/water)

Not available

Auto Ignition Point (°C)

175 (Diethylether)

Decomposition Temperature (°C)

Not available

Kinematic Viscosity (cSt)

Not available

Explosive properties

Not available

Oxidizing properties

Not available

Other information

Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions.

Chemical stability

Stable.

QUICK START ENGINE STARTER

Possibility of hazardous reactions

None anticipated.

Conditions to avoid

Avoid contact with heat and ignition sources.

Incompatible materials

This product should be stored away from sources of strong heat or oxidizing chemicals.

Hazardous decomposition product(s)

Carbon monoxide, Carbon dioxide, Acrid smoke

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Skin Contact, Eye Contact

Information on toxicological effects

Diethyl Ether (CAS# 60-29-7):

Acute toxicity

Oral: LD50 = 1600 mg/kg-bw (rat)
Dermal: LD50 >20000 mg/kg-bw (rabbit)
May cause drowsiness or dizziness.

Irritation/Corrosivity

Non-irritant to skin and eye.

Sensitisation

It is not a skin sensitiser.

Repeated dose toxicity

Not to be expected.

Carcinogenicity

Not to be expected.

| NTP | IARC | ACGIH | OSHA | NIOSH |
|-----|------|-------|------|-------|
| No. | No. | No. | No. | No. |

Mutagenicity

Not to be expected.

Toxicity for reproduction

Not to be expected.

Toluene (CAS#108-88-3):

Acute toxicity

Oral LD50 = 5580 mg/kg (rat)
Dermal LD50 >5000 mg/kg (rabbit)
Inhalation LC50 (4 hour(s)) 28.1 mg/l (rat) - Vapours may cause drowsiness and dizziness.

Irritation / Corrosivity

Causes serious eye irritation. Causes skin irritation.

Sensitisation

It is not a skin sensitiser.

Repeated dose toxicity

Inhalation NOAEC = 1131 mg/m³ (rat), 2 Year(s) - May cause damage to organs through prolonged or repeated exposure: neuropsychological effects, auditory dysfunction and effects on colour vision.

Carcinogenicity

It is unlikely to present a carcinogenic hazard to man.

| NTP | IARC | ACGIH | OSHA | NIOSH |
|-----|------|-------|------|-------|
| No. | No. | No. | No. | No. |

Mutagenicity

There is no evidence of mutagenic potential.

Reproductive toxicity

Suspected of damaging the unborn child. NOAEC: 2.8 mg/liter (rat)

Chloroethane (CAS# 75-00-3)

Carcinogenicity

| NTP | IARC | ACGIH | OSHA | NIOSH |
|-------------------------------|------|----------------------------------|------|-------|
| Clear Evidence in Female Mice | No. | A3 - Confirmed Animal Carcinogen | No. | Yes. |

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Short term

Not available.

Long Term

Not available.

QUICK START ENGINE STARTER

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

SECTION 14: TRANSPORT INFORMATION

| | Road | Sea (IMDG) | Air (ICAO/IATA) |
|------------------------------|---|---|---|
| UN number | 1954 | 1954 | 1954 |
| Proper Shipping Name | Compressed gas, flammable, n.o.s. (contains diethyl ether and carbon dioxide) | Compressed gas, flammable, n.o.s. (contains diethyl ether and carbon dioxide) | Compressed gas, flammable, n.o.s. (contains diethyl ether and carbon dioxide) |
| Transport hazard class(es) | 2.1 | 2.1 | 2.1 |
| Packing group | Not applicable | Not applicable | Not applicable |
| Environmental hazards | None assigned | None assigned | None assigned |
| Special precautions for user | None assigned | None assigned | None assigned |

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

SECTION 15: REGULATORY INFORMATION

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

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

| Chemical Name | CAS No. | Typical %wt. | RQ (Pounds) |
|---------------|----------|--------------|-------------|
| Diethylether | 60-29-7 | ~58 | 100 |
| Chloroethane | 75-00-3 | < 2 | 1000 |
| Toluene | 108-88-3 | < 1 | 1000 |

SARA 311/312 - Hazard Categories:

☒ Fire ☒ Sudden Release ☐ Reactivity ☒ Immediate (acute) ☒ Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

| Chemical Name | CAS No. | Typical %wt. |
|---------------|----------|--------------|
| Chloroethane | 75-00-3 | < 2 |
| Toluene | 108-88-3 | < 1 |

SARA 302 - Extremely Hazardous Substances (40 CFR 355):

| Chemical Name | CAS No. | Typical %wt. | TPQ (pounds) |
|---------------|---------|--------------|--------------|
| None | ---- | ---- | ---- |

California Proposition 65 List:

| Chemical Name | CAS No. | Type of Toxicity |
|---------------|----------|------------------------------------|
| Toluene | 108-88-3 | Developmental, Female Reproductive |
| Chloroethane | 45-00-3 | Cancer |

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: August 17, 2015

QUICK START ENGINE STARTER

Hazard Statement(s) and Risk Phrases Listed in: SECTION 2:/ SECTION 3:

Hazard Statement(s)

- H220: Extremely flammable gas.
- H224: Extremely flammable liquid and vapour.
- H225: Highly flammable liquid and vapour.
- H280: Contains gas under pressure; may explode if heated.
- H302: Harmful if swallowed.
- H304: May be fatal if swallowed and enters airways.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H336: May cause drowsiness or dizziness.
- H351: Suspected of causing cancer.
- H361d Suspected of damaging the unborn child.
- H373: May cause damage to organs through prolonged or repeated exposure.
- H401: Toxic to aquatic life.
- H411: Toxic to aquatic life with long lasting effects.
- H412: Harmful to aquatic life with long lasting effects.

Training advice: None.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.