QUICK START ENGINE STARTER

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade Name: Quick Start Engine Starter ref: SGES1

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

Identified Use(s)	Starting Fluid
Uses Advised Against	None

1.3. Details of the supplier of the safety data sheet

Company Identification

Silverhook Ltd.
Unit 14 Bates Road,
Harold Wood, London, England
RM3 0JH
Tel.: +44 (0) 1708330500
Fax.: +44 (0) 1708330504
Email: 522@silverhook.co.uk
Responsible person email: 522@silverhook.co.uk

1.4 Emergency telephone number

+44(0)1708330500 (during office hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1. 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

2.2. Label elements

Hazard Symbol

Signal word(s) **DANGER**

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.

Precautionary Statement(s)

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 50ºC/122ºF.
Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

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

3.2. Mixtures

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

4.1. 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.

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

May cause drowsiness or dizziness.

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

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

SECTION 5: FIRE-FIGHTING MEASURES

5.1. 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.

5.2. Special hazards arising from the substance or mixture: Contains gas under pressure; may explode if heated.

5.3. 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

6.1. 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.

6.2. Environmental precautions: Prevent liquid entering sewers, basements and work pits. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections: None

Additional Information: None

SECTION 7: HANDLING AND STORAGE

7.1. 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.

7.2. 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.

7.3. Specific end use(s)

Starting Fluid

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. 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

Recommended monitoring method NIOSH 1500 (hydrocarbons, B.P. 36 - 126 ºC); NIOSH 1610 (Ethyl ether); NIOSH 2519 (Ethyl chloride); NIOSH 1501 (Aromatic hydrocarbons)

8.2. 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

9.1 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

9.2 Other information

Not available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity Stable under normal conditions.

10.2. Chemical stability Stable.

10.3. Possibility of hazardous reactions None anticipated.

10.4. Conditions to avoid Avoid contact with heat and ignition sources.

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

10.6. Hazardous decomposition product(s) Carbon monoxide, Carbon dioxide, Acrid smoke

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Skin Contact, Eye Contact

11.1. 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/m^3 (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.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. 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

15.1. 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

15.2 Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

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

Date of preparation: August 10, 2020

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.