SAFETY DATA SHEET (SDS)

Section 1. Identification

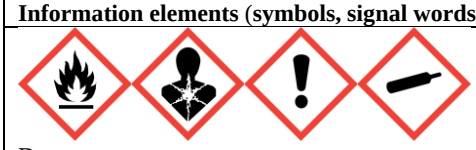
Product identifier	TFE SPRAY
Other means of identification	19350
Recommended use and restrictions on use	Lubricant/Aerosol
Initial supplier identifier	Asalco Inc. 44, ch. Des Ursulines, Stanstead, Québec (Canada), J0B 3E0 Telephone 819-876-2211; Fax 819-876-5373; Internet www.asalco.com
Emergency telephone number/restriction on use	Canada – CANUTEC 24 hour number 613-996-6666

Section 2. Hazard identification

Classification of hazardous product (name of the category or subcategory of the hazard class)

Extremely flammable aerosol (Category 1)
Gas under pressure (compressed gas)
Skin irritation (Category 2)
Eye irritation (Category 2A)
Aspiration hazard (Category 1)
Specific target organ toxicity – single exposure (Category 3), Central nervous system
Reproductive toxicity (Category 2)
Specific target organ toxicity - repeated exposure (Category 2)

Information elements (symbols, signal words, hazard statements and precautionary statements of the category/subcategory)



Danger
H222 Extremely flammable aerosol.
H229 Pressurized container: may burst if heated.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
*** May displace oxygen and cause rapid suffocation. P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. 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. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash hands/nails/face thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P310 IF SWALLOWED: Immediately call a doctor. P331 DO NOT INDUCE VOMITING. P302+P352 IF ON SKIN, Wash with plenty of water for several minutes. P332 + P313 If skin irritation occurs: Get medical attention. P362+P364 Take off contaminated clothing and wash it before reuse. P305+P351+P338 IF IN EYES, Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical attention. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a doctor if you feel unwell. P308 + P313 IF exposed or concerned: Get medical attention. P410+P412+P403+P233 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated area. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/container into safe container in accordance with local, regional or national regulations.

Other hazards known	Simple Asphyxiants (Category 1) A gas that is a simple asphyxiant***

Section 3. Composition/information on ingredients

Chemical name (common name/synonyms)	CAS number or other	Concentration (%)
Acetone	67-64-1	15-40
Hexane	110-54-3	10-30
Naphtha, hydrotreated light	64742-49-0	7-13
Isopropanol	67-63-0	< 3
Cyclohexane	110-82-7	< 1
Isobutane	75-28-5	7-13
Propane	74-98-6	10-30

* Statement - This safety data sheet provides concentration range(s) instead of the actual concentration(s) considered trade secret(s).

Section 4. First-aid measures	
Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.
Ingestion	IF SWALLOWED: Immediately call a doctor. DO NOT INDUCE VOMITING. NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Rinse mouth thoroughly with water. Have victim drink two glasses of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.
Skin contact	IF ON SKIN, Wash with plenty of water for several minutes (15-20). If skin irritation occurs: Get medical attention.
Eye contact	IF IN EYES, Rinse cautiously with water for several minutes (15-20). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Most important symptoms and effects (acute or delayed)	Eye or skin irritation.
Indication of immediate medical attention/special treatment	In all cases, call a doctor. Do not forget this document.

Section 5. Fire-fighting measures

Specific hazards of the hazardous product (hazardous combustion products)

Carbon oxides and other irritant/toxic gases and fumes.

Suitable and unsuitable extinguishing media

In case of fire: Use carbon dioxide, chemical powder agent and appropriate foam to extinguish.

Special protective equipment and precautions for fire-fighters

During a fire, irritating/toxic smoke and fumes may be generated. Do not enter fire area without proper protection. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece. Shield personnel to protect from venting, rupturing or bursting cans. Move containers from fire area if it can be done without risk. Water spray may be useful in cooling equipment and cans exposed to heat and flame.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment (See Section 8).

Methods and materials for containment and cleaning up

Ventilate area of release. Stop the leak if it can be done safely. Contain and absorb any spilled liquid concentrate with inert absorbent material, then place material into a container for later disposal (see Section 13). Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required.

Section 7. Handling and storage

Precautions for safe handling

Wear protective gloves/ protective clothing/ eye protection/ face protection. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area.

Before handling, it is very important that engineering controls are operating, and that protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use. Inspect containers for leaks before handling. Label containers appropriately. Ensure proper ventilation. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. Avoid generating high concentrations of dusts, vapours or mists. Keep away from incompatible materials (Section 10). Keep containers closed when not in use. Empty containers are always dangerous. Refer also to Section 8. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Store away from incompatible materials (Section 10). Inspect all incoming containers to make sure they are properly labelled and not damaged. Storage area should be clearly identified, clear of obstruction and accessible only to trained personnel. Inspect periodically for damage or leaks.

Section 8. Exposure controls/Personal protection

Control parameters (biological limit values or exposure limit values and source of those values)

Exposure limits: CAS 110-54-3 – ACGIH – TLV-TWA (STEL) and/or PEL-TWA 50 ppm; CAS 110-82-7 – ACGIH – TLV-TWA 100 ppm; CAS 67-63-0 – ACGIH – TLV-TWA 200 ppm & TLV-STEL 400 ppm & PEL-TWA 400 ppm; CAS 74-98-6 & 75-28-5 – ACGIH – TLV-TWA (STEL) et/ou PEL-TWA 1000 ppm; CAS 67-64-1 – ACGIH – TLV-TWA 500 ppm & TLV-STEL 750 ppm;

Appropriate engineering controls

Use under well-ventilated conditions. Local exhaust ventilation system is recommended to maintain concentrations of contaminants below exposure limits. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Individual protection measures/personal protective equipment

Respiratory protection is required if the concentrations are higher than the exposure limits. Use a NIOSH approved respirators if the exposure limits are unknown. Chemically protective gloves (impervious), and other protective clothing to prevent prolonged or repeated skin contact, must be worn during all handling operations. Wear protective chemical splash goggles to prevent mists from entering the eyes. Wash hands/nails/face thoroughly after handling. Do not eat, drink or smoke when using this product. Practice good personal hygiene after using this material. Remove and wash contaminated work clothing before re-use.

Section 9. Physical and chemical properties

Appearance, physical state/colour	Liquid (aerosol)	**Vapour pressure**	Not available
Odour	Petroleum	**Vapour density**	Heavier than air
Odour threshold	Not available	**Relative density**	Not available
pH	Not available	**Solubility**	Negligible
Melting/freezing point	Not available	**Partition coefficient - n-octanol/water**	Not available
Initial boiling point/range	Not available	**Auto-ignition temperature**	Not available
Flash point	Not available	**Decomposition temperature**	Not available
Evaporation rate	Not available	**Viscosity**	Not available
Flammability (solids and gases)	Extremely flammable aerosol	**VOC**	Not available
Upper and lower flammability/explosive limits	Not available	**Other**	None known

Section 10. Stability and reactivity

Reactivity

Does not react under the recommended storage and handling conditions prescribed.

Chemical stability

Stable under the recommended storage and handling conditions prescribed.

Possibility of hazardous reactions

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Conditions to avoid (static discharge, shock or vibration)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Incompatible materials

Oxidizing materials; etc.

Hazardous decomposition products

None known

Section 11. Toxicological information

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)

May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May displace oxygen and cause rapid suffocation. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

Symptoms related to the physical, chemical and toxicological characteristics

Skin irritation, redness, stinging, pain; Eye irritation, redness, tearing; Respiratory tract irritation, coughing, shortness of breath, dizziness, drowsiness, nausea and headaches.

Delayed and immediate effects (chronic effects from short-term and long-term exposure)

Skin Sensitization – No data available; Respiratory Sensitization – No data available; Germ Cell Mutagenicity – No data available; Carcinogenicity – No ingredient listed by IARC, ACGIH, NTP; Reproductive Toxicity – Possible; Specific Target Organ Toxicity — Single Exposure – Possible; Specific Target Organ Toxicity — Repeated Exposure – Possible; Aspiration Hazard – Possible; Health Hazards Not Otherwise Classified – No data available.

Numerical measures of toxicity (ATE; LD_{50} & LC_{50})

CAS 67-64-1 LD_{50} Oral - Rat - 5,800 mg/kg; LC_{50} Inhalation - Rat - 8 h - 50,100 mg/m^3; LD_{50} Dermal - Guinea pig - 7,426 mg/kg; CAS 110-54-3 DL_{50} Oral - Rat – 25 g/kg & LC_{50} - Rat – 48000 ppm 4H; CAS 110-82-7 LD_{50} Oral - Rat – 12705 mg/kg & LC_{50} - Rat – 34000 mg/m^3 4H; CAS 67-63-0 LD_{50} Oral - Rat - 4720 mg/kg; LC_{50} Inhalation - Rat - 17000 ppm 4hrs; LD_{50} Dermal - Rabbit - 12890 mg/kg; CAS 75-28-5 CL_{50} 658000 mg/m^3 4 hrs (rat);
ATE not available in this document.

Section 12. Ecological information

Ecotoxicity (aquatic and terrestrial information)	No data available for this product.
Persistence and degradability	No data available for this product.
Bioaccumulative potential	No data available for this product.
Mobility in soil	No data available for this product.
Other adverse effects	No data available

Section 13. Disposal considerations

Information on safe handling for disposal/methods of disposal/contaminated packaging

Dispose of contents/container into safe container in accordance with local, regional or national regulations.

Section 14. Transport information

UN number; Proper shipping name; Class(es); Packing group (PG) of the TDG Regulations

UN1950; AEROSOLS; CLASS 2.1

UN number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime)

UN1950; AEROSOLS; CLASS 2.1

UN number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air)

UN1950; AEROSOLS, FLAMMABLE; CLASS 2.1

Special precautions (transport/conveyance)	May also be shipped as a LIMITED QUANTITY in accordance with TDG.
Environmental hazards (IMDG or other)	None
Bulk transport (usually more than 450 L in capacity)	Not possible

Section 15. Regulatory information

Safety/health Canadian regulations specifics	Refer to Section 2 for the appropriate classification. This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).
Environmental Canadian regulations specifics	Refer to Section 3 for ingredient(s) of the DSL

Safety/health/environmental outside regulations specifics

United States OSHA information: This product is regulated according to OSHA (29 CFR).
United States EPA (Environmental Protection Agency) information: 40 CFR Refer to the ingredients listed in Section 3 & Sections 12; 13 & 14.
United States TCSA information: Refer to the ingredients listed in Section 3.
National Fire Protection Association (NFPA):
HEALTH: 2 FLAMMABILITY: 4 INSTABILITY: 1 SPECIAL HAZARDS: Refer to Section 2 & 3.
HAZARD SCALE: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Section 16. Other information

Date of the latest revision of the safety data sheet	June 29, 2020 version 2 (NSS ENTREPRISE INC.)
Corrections	Sections 2; 3;
References	Safety Data Sheets from manufacturer/supplier & from Canadian Centre for Occupational Health and Safety, CCOHS.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
ATE	Acute toxicity estimate
CAS	Chemical Abstract Service
DSL	Domestic Substance List
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods Code
LC	Lethal concentration
LD	Lethal Dosage
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program (U.S.A.)
OSHA	Occupational Safety and Health Administration (U.S.A.)
PEL	Permissible Exposure Limit
STEL	Short-term Exposure Limit
TDG	Transport of dangerous goods in Canada
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.