

SAFETY DATA SHEET

Page 1 of 6 **HFT-68289**

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards

SDS Revision: 5.0

SDS Revision Date: 12/24/2015

| 1.1 | Product Name: | ARCTIC FREEZE® REFRIGERANT CARB CERTIFIED | |
|-----|------------------------------|--|--|
| 1.2 | Chemical Name: | 1,1,1,2-Tetrafluoroethane | |
| 1.3 | Synonyms: | P/N 68289 | |
| 1.4 | Trade Names: | Arctic Freeze® | |
| 1.5 | Product Uses & Restrictions: | Refrigerant | |
| 1.6 | Distributor's Name: | Harbor Freight Tools USA, Inc. | |
| 1.7 | Distributor's Address: | 26541 Agoura Road, Calabasas, CA 91302 USA | |
| 1.8 | Emergency Phone: | CHEMTREC: +1 (703) 527-3887 / +1 (800) 424-9300 (CCN 676687) | |
| 1.9 | Business Phone / Fax: | +1 (805) 388-1000 | |

2. HAZARDS IDENTIFICATION

2.1 Hazard Identification: This product is classified as a HAZARDOUS SUBSTANCE and as DANGEROUS GOODS according to the classification criteria of NOHSC: 1008(2004) and ADG Code (Australia). KEEP OUT OF REACH OF CHILDREN.

WARNING. CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED.

Classification: Liquefied Gas.

Hazard Statements (H): H280 - Contains gas under pressure; may explode if heated.

Precautionary Statements (P): P280 – Wear protective gloves and eye protection. P302 + P352 - IF ON SKIN – Wash with soap and water. P333 + P313 - If skin irritation or a rash occurs – Get medical advice/attention. P305+P351+P338 – IF IN EYES - Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice/attention. P304 - IF INHALED: Move to fresh air. If breathing has stopped, give artificial respiration and call physician immediately. P410 + P412 - Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122°F. P410+P403 – Protect from sunlight. Store in a well-ventilated place. P501 – Dispose of contents/container through licensed treatment, storage or disposal facility.



3. COMPOSITION & INGREDIENT INFORMATION

| | | | | | | | | EXPO | SURE LI | MITS IN | I AIR (mg | g/m³) | |
|-----------------------------|--------------|-----------|------------|-------|-----|------|------|------|---------|---------|-----------|-------|----------|
| | | | | | AC | GIH | | NOHS | | | OSHA | | |
| | | | | | р | om | | ppm | | | ppm | | |
| | | | | | | | ES- | ES- | ES- | | | | |
| CHEMICAL NAME(S) | CAS No. | RTECS No. | EINECS No. | % | TLV | STEL | TWA | STEL | PEAK | PEL | STEL | IDLH | OTHER |
| 1 1 1 2 TETRACI LIODOTLIANE | 811-97-2 | KI8842500 | 212-377-0 | 100 | NA | NA | 4240 | NF | NF | NA | NA | NA | 1000 TWA |
| 1,1,1,2-TETRAFLUOROTHANE | Liq. Gas; H2 | 280 | | | | | | | | | | | |
| POLYALKYLENE GLYCOL | NA | NA | NA | 5-15 | NA | NA | NF | NF | NF | NA | NA | NA | |
| MONOBUTYL ETHER | | | | | | | | | | | | | |
| ADDITIVE DAOKAGE | NA | NA | NA | 1-10 | NA | NA | NF | NF | NF | NA | NA | NA | |
| ADDITIVE PACKAGE | | | | | | | | | | | | | |
| LEAK CEALED | NA | NA | NA | 0.1-1 | NA | NA | NF | NF | NF | NA | NA | NA | |
| LEAK SEALER | | | | | | | | | | | | | |

4. FIRST AID MEASURES

| | | | 4. FIRST AID MEASURES |
|-----|----------------------|-------------|--|
| 4.1 | First Aid: | Ingestion: | If ingested, do not induce vomiting. Contact the nearest Poison Control Center or local emergency number. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed. |
| | | Eyes: | Splashes are not likely; however, if product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes. If irritation occurs, contact a physician. |
| | | Skin: | If irritation occurs and product is on the skin, rinse thoroughly with lukewarm water, followed by a thorough washing of the affected area with soap and water. If irritation, redness or swelling persists, contact a physician immediately. |
| | | Inhalation: | Remove victim to fresh air at once. If breathing is difficult, provide supplemental oxygen. If breathing has stopped, provide artificial respiration. Seek immediate medical attention. Provide supportive treatment, keeping victim warm and quiet. |
| 4.2 | Effects of Exposure: | Ingestion: | If product is swallowed, may cause nausea, vomiting and/or diarrhea. |
| | | Eyes: | "Frostbite-like" effects may occur if the liquid or escaping vapors contact the eyes. Mists may cause irritation. |
| | | Skin: | Frostbite-like" effects may occur if the liquid or escaping vapors contact the skin. Mists may cause irritation. |
| | | Inhalation: | Gross overexposure may cause central nervous system depression, dizziness, confusion, incoordination, drowsiness, irregular heartbeat accompanied by a strange feeling in the chest, "heart thumping," apprehension, light-headedness, weakness, fainting, loss of consciousness, and death. |
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HARBOR FREIGHT TOOLS
Quality Tools at Ridiculously Low Prices

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| 4.3 | <u> </u> | 4. FIRST AID MEASURES – co | | | | | | | |
|--------------------------|--|--|--|--|--|--|--|--|--|
| 1.0 | Symptoms of Overexposure: | Inhalation may cause dizziness, confusion, incoordination, drowsiness, irregular heartbeat accompanied by a strang feeling in the chest, "heart thumping", apprehension, light-headedness, weakness, fainting, loss of consciousness, and death. | | | | | | | |
| 1.4 | Acute Health Effects: | "Frostbite-like" effects may occur if the liquid or escaping vapors contact the eyes. Mists may cause irritation. | | | | | | | |
| .5 | Chronic Health Effects: | "Frostbite-like" effects may occur if the liquid or escaping vapors contact the skin. Mists may cause irritation. | | | | | | | |
| 6 | Target Organs: | Eyes, Skin, Respiratory System | | | | | | | |
| 7 | Medical Conditions Aggravated by Exposure: | Pre-existing dermatitis, other skin conditions, and disorders of | | ALTH | | | | 1 | |
| | Aggravated by Exposure. | target organs (eyes and skin). Pre-existing cardiovascular or cer | ntral FL | FLAMMABILITY | | | | | |
| | | nervous system diseases. | PH | YSICA | L HAZ | ARDS | | 1 | |
| | | | PR | OTEC | ΓIVE E | QUIPM | ENT | В | |
| | | | EYI | | SKIN | | | | |
| | | | -0 | | | • | | | |
| 1 | Fire & Explosion Hazards: | 5. FIREFIGHTING MEASURE This product is non-flammable. Cylinders may rupture under f | | iono T | hia mat | متنما بينالا | . 1 | | |
| | | become combustible when mixed with air under pressure and expectation may occur. Contact of welding or soldering torch refrigerant can result in visible changes in the size and color of will only occur in concentrations of product well above the recomstop all work and ventilate the area before proceeding. Us refrigerant vapors from the work area before using any open flame. | flames wit the torch to mended e e forced es. | h high of flame. exposure ventilat | oncentra The flan e limit, to ion to | ations of ne effect herefore | f t | 0 | |
| 2 | Extinguishing Methods: Firefighting Procedures: | Water, Foam, CO ₂ , Dry Chemical. Use media appropriate for surr As in any fire, wear MSHA/NIOSH approved self-contained | | | | | _ < | 7 1 | |
| | | spray to cool fire-exposed surfaces and to protect personal. Figh fire control or dilution from entering sewers, drains, drinking water Firefighters must use full bunker gear including NIOSH-approved breathing apparatus to protect against potential hazardous comb and oxygen deficiencies. | r supply, o | or any na pressur | atural water self-c | aterway. ontained | | | |
| | | 6. ACCIDENTAL RELEASE MEAS | SURES | 3 | | | | | |
| | | Equipment (PPE). Secure spill area, remove or minimize all sou | irces of ia | nition, a | nd max | imize ve | ntilation | Stan enill | |
| | | leak at source if safely possible. Deny entry to all unprotected inc appropriate personal protective equipment. Recover free liquid appropriate container(s) for disposal. If necessary, dike well and any natural waterway or drinking supply. Contact appropriate le reporting requirements. | lividuals. or cover ead of the | with ine spill to | als invo ert abso preven | lved in the rbent meter trunoff | he cleanı aterial ar into drain | ip must we nd place in s, sewers | |
| | | leak at source if safely possible. Deny entry to all unprotected inc appropriate personal protective equipment. Recover free liquid appropriate container(s) for disposal. If necessary, dike well and any natural waterway or drinking supply. Contact appropriate li- reporting requirements. | dividuals. or cover ead of the ocal and/o | with ine spill to or provir | als invo ert abso preven | lved in the rbent meter trunoff | he cleanı aterial ar into drain | ip must we nd place ir s, sewers | |
| 1 | Work & Husiana Practices: | leak at source if safely possible. Deny entry to all unprotected inc appropriate personal protective equipment. Recover free liquid appropriate container(s) for disposal. If necessary, dike well and any natural waterway or drinking supply. Contact appropriate in reporting requirements. 7. HANDLING & STORAGE INFOR | dividuals. or cover ead of the ocal and/o | with ine e spill to or provir | als invo ert abso preven ncial aut | lved in the street must runoff the street the street must be stree | he cleant aterial ar into drain for assis | up must we nd place ir s, sewers tance and | |
| .1 | Work & Hygiene Practices: | leak at source if safely possible. Deny entry to all unprotected inc appropriate personal protective equipment. Recover free liquid appropriate container(s) for disposal. If necessary, dike well and any natural waterway or drinking supply. Contact appropriate in reporting requirements. 7. HANDLING & STORAGE INFOR Use normal hygiene practices. Avoid direct skin contact. Wash | dividuals. or cover ead of the ocal and/o | with ine e spill to or provir | als invo ert abso preven ncial aut | lved in the street must runoff the street the street must be stree | he cleant aterial ar into drain for assis | up must we nd place ir is, sewers tance and | |
| | Work & Hygiene Practices: Storage & Handling: | leak at source if safely possible. Deny entry to all unprotected inc appropriate personal protective equipment. Recover free liquid appropriate container(s) for disposal. If necessary, dike well and any natural waterway or drinking supply. Contact appropriate in reporting requirements. 7. HANDLING & STORAGE INFOR | dividuals. or cover ead of the ocal and/o MATIC h hands the from excempatible in | with ine spill to or proving DN morough | als invo | lved in the report of the remains the rema | he cleanu aterial ar into drain for assis is produc es, spark n 10. Do | ip must we had place in as, sewers tance and at and before, and other s, and other s, and other series are series. | |
| 2 | | leak at source if safely possible. Deny entry to all unprotected inc appropriate personal protective equipment. Recover free liquid appropriate container(s) for disposal. If necessary, dike well and any natural waterway or drinking supply. Contact appropriate in reporting requirements. 7. HANDLING & STORAGE INFOR Use normal hygiene practices. Avoid direct skin contact. Wash eating, drinking, or smoking. Use and store in a cool, dry, well-ventilated area. Keep away possible sources of ignition. Do not store near or with any incompared to the protection of the pr | mage. Do | with ine spill to pr proving p | als invo ert abso preven ncial auf ly after neat, op s listed i re in sub | lved in the structure of the structure o | he cleanu aterial ar into drain for assis is produc es, spark n 10. Do areas. | ip must wend place in s, sewers tance and tand befores, and other or not store | |
| 2 | Storage & Handling: | leak at source if safely possible. Deny entry to all unprotected inc appropriate personal protective equipment. Recover free liquid appropriate container(s) for disposal. If necessary, dike well and any natural waterway or drinking supply. Contact appropriate in reporting requirements. 7. HANDLING & STORAGE INFOR Use normal hygiene practices. Avoid direct skin contact. Wash eating, drinking, or smoking. Use and store in a cool, dry, well-ventilated area. Keep away possible sources of ignition. Do not store near or with any incorunmarked or open containers. Protect cylinders from physical dar Readily available emergency fire, first aid, and spill response equi | mATIC from exceptable in mage. Do pment and | with ine spill to or proving the proving t | als invo ert abso preven ncial aut ly after neat, op s listed i re in sub asures a | lved in the structure of the structure o | he cleanu aterial ar into drain for assis is produc es, spark n 10. Do areas. | ip must wend place in s, sewers tance and tand befores, and other or not store | |
| 3 | Storage & Handling: Special Precautions: | leak at source if safely possible. Deny entry to all unprotected inc appropriate personal protective equipment. Recover free liquid appropriate container(s) for disposal. If necessary, dike well and any natural waterway or drinking supply. Contact appropriate ligreporting requirements. 7. HANDLING & STORAGE INFOR Use normal hygiene practices. Avoid direct skin contact. Wash eating, drinking, or smoking. Use and store in a cool, dry, well-ventilated area. Keep away possible sources of ignition. Do not store near or with any incorunmarked or open containers. Protect cylinders from physical dar Readily available emergency fire, first aid, and spill response equi | mage. Do | with ine spill to or proving the proving t | als invo | lved in the structure of the structure o | he cleanu aterial ar into drain for assis is produc es, spark n 10. Do areas. y recomm | ip must we not place in s, sewers tance and to tand before s, and other or not store | |
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| 3 | Storage & Handling: Special Precautions: Exposure Limits: | leak at source if safely possible. Deny entry to all unprotected inc appropriate personal protective equipment. Recover free liquid appropriate container(s) for disposal. If necessary, dike well and any natural waterway or drinking supply. Contact appropriate in reporting requirements. 7. HANDLING & STORAGE INFOR Use normal hygiene practices. Avoid direct skin contact. Wash eating, drinking, or smoking. Use and store in a cool, dry, well-ventilated area. Keep away possible sources of ignition. Do not store near or with any incorunmarked or open containers. Protect cylinders from physical dar Readily available emergency fire, first aid, and spill response equi 8. EXPOSURE CONTROLS & PERSONAL ACGIH NOHSC CHEMICAL NAME(S) TLV STEL TWA STEL | mage. Do | with ine spill to proving prov | als invo | lved in the structure of the structure o | he cleanu aterial ar into drain for assis is product es, spark n 10. Do areas. y recomm | ap must we not place in s., sewers tance and tand before s., and otto not store mended. | |
| 3 | Storage & Handling: Special Precautions: Exposure Limits: ppm (mg/m³) | leak at source if safely possible. Deny entry to all unprotected inc appropriate personal protective equipment. Recover free liquid appropriate container(s) for disposal. If necessary, dike well and any natural waterway or drinking supply. Contact appropriate in reporting requirements. 7. HANDLING & STORAGE INFOR Use normal hygiene practices. Avoid direct skin contact. Wash eating, drinking, or smoking. Use and store in a cool, dry, well-ventilated area. Keep away possible sources of ignition. Do not store near or with any incord unmarked or open containers. Protect cylinders from physical dark Readily available emergency fire, first aid, and spill response equitable acquired by the store of the | MATIC mage. Do pment and ES- PEAK NF | with ine spill to proving the | als invo ert abso preven ncial auf ly after neat, op s listed i re in sub asures a TION OSHA STEL NA | lved in the street of the stre | he cleanuaterial arinto drain for assis is produces, spark n 10. Do areas. | ap must we not place in s., sewers tance and tand before s., and otto not store mended. | |
| 3 | Storage & Handling: Special Precautions: Exposure Limits: | leak at source if safely possible. Deny entry to all unprotected inc appropriate personal protective equipment. Recover free liquid appropriate container(s) for disposal. If necessary, dike well and any natural waterway or drinking supply. Contact appropriate in reporting requirements. 7. HANDLING & STORAGE INFOR Use normal hygiene practices. Avoid direct skin contact. Wash eating, drinking, or smoking. Use and store in a cool, dry, well-ventilated area. Keep away possible sources of ignition. Do not store near or with any incorunmarked or open containers. Protect cylinders from physical dar Readily available emergency fire, first aid, and spill response equi 8. EXPOSURE CONTROLS & PERSONAL ACGIH NOHSC CHEMICAL NAME(S) TLV STEL TWA STEL | MATIC mage. Do pment and PRO ES- PEAK NF nerally added in low of the proper in the properties of the properties | with ine spill to proving the | lals invo | using the en flamen section surface tree highly NA exhaust ees. Ref | ne cleanuaterial arinto drain for assis is produces, spark n 10. Do areas. y recomm OTHER 1000 TW should be rigerant of | at and before and other an | |
| 7.1 7.2 3.1 3.2 | Storage & Handling: Special Precautions: Exposure Limits: ppm (mg/m³) Ventilation & Engineering | leak at source if safely possible. Deny entry to all unprotected inc appropriate personal protective equipment. Recover free liquid appropriate container(s) for disposal. If necessary, dike well and any natural waterway or drinking supply. Contact appropriate in reporting requirements. 7. HANDLING & STORAGE INFOR Use normal hygiene practices. Avoid direct skin contact. Wash eating, drinking, or smoking. Use and store in a cool, dry, well-ventilated area. Keep away possible sources of ignition. Do not store near or with any incord unmarked or open containers. Protect cylinders from physical dar Readily available emergency fire, first aid, and spill response equi 8. EXPOSURE CONTROLS & PERSONAL ACGIH NOHSC CHEMICAL NAME(S) TLV STEL TWA STEL 1,1,1,2-TETRAFLUOROETHANE NA NA 4240 NF Normal ventilation for standard manufacturing procedures is ger large amounts are released. Mechanical ventilation should be use monitors may be necessary to determine vapor concentrations in | MATIC MATIC hands the correction hands the mage. Do pment and pread in low control work area metances OSHA's | with ine spill to or proving the spill to or spill to | lals invo | lved in the street of the stre | ne cleanuaterial arinto drain for assis is produces, spark n 10. Do areas. y recommother 1000 TW should be rigerant or other | et and before in not store | |



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| 8.5 | Hand Protection: | EXPOSURE CONTROLS & PERSONAL PROTECTION – cont'd |
|------|---|--|
| 6.5 | nand Protection. | Use gloves constructed of chemical-resistant materials such as neoprene or heavy nitrile rubber if frequent or prolonged contact is expected. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, or the EU member states. |
| 8.6 | Body Protection: | Avoid prolonged and/or repeated skin contact. Use clean and impervious protective clothing (e.g., neoprene or Tyvek®) if splashing or spraying conditions are present. Protective clothing should include long-sleeves, apron, boots and additional facial protection. If necessary, refer to appropriate standards of Canada, the EU member states, or U.S. OSHA. |
| | | 9. PHYSICAL & CHEMICAL PROPERTIES |
| 9.1 | Appearance: | Pressurized clear liquid. |
| 9.2 | Odor: | slight ethereal odor. |
| 9.3 | Odor Threshold: | NA NA |
| 9.4 | pH: | 4.00-5.00 |
| 9.5 | Melting Point/Freezing Point: | NA NA |
| 9.6 | Initial Boiling Point/Boiling Range: | NA NA |
| 9.7 | Flashpoint: | 204 °C (399 °F) (liquid portion of product) |
| 9.8 | Upper/Lower Flammability Limits: | LEL: 11,000 ppm / UEL: 94,000 ppm (liquid portion of product) |
| 9.9 | Vapor Pressure: | NA |
| 9.10 | Vapor Density: | NA NA |
| 9.11 | Relative Density: Solubility: | NA Localida |
| 9.12 | Partition Coefficient (log P _{ow}): | Insoluble |
| 9.14 | Autoignition Temperature: | NA >400 °C (752 °F) |
| 9.15 | Decomposition Temperature: | NA NA |
| 9.16 | Viscosity: | NA NA |
| 9.17 | Other Information: | NA NA |
| | | |
| | | 10. STABILITY & REACTIVITY |
| 10.1 | Stability: | This product is stable. |
| 10.2 | Hazardous Decomposition Products: | Warning! Hazardous decomposition products are hazardous. Thermal decomposition can yield hydrofluoric acid and possibly carbonyl fluoride. These materials are toxic and irritating. Contact should be avoided. |
| 10.3 | Hazardous Polymerization: | Will not occur. |
| 10.4 | Conditions to Avoid: | Open flames, sparks, high heat, and close proximity to incompatible substances. |
| 10.5 | Incompatible Substances: | Alkalis, and alkaline earth materials |
| | | 44 TOVICOL COICAL INFORMATION |
| | 1 | 11. TOXICOLOGICAL INFORMATION |
| 11.1 | Routes of Entry: | Inhalation: YES Absorption: YES Ingestion: YES |
| 11.2 | Toxicity Data: | The product has not been tested for specific toxicity data. Animal studies, available in scientific literature, have shown that this material is a slight irritant, but not a sensitizer. |
| 11.3 | Acute Toxicity: | See section 4.4 |
| 11.4 | Chronic Toxicity: | See section 4.5 |
| 11.5 | Suspected Carcinogen: | No |
| 11.6 | Reproductive Toxicity: | This product is not reported to produce reproductive toxicity in humans. |
| | Mutagenicity: | Tests have shown that this material does not cause genetic damage in bacterial or mammalian cell cultures, or ir animals. |
| | Embryotoxicity: | Animal data shows slight fetotoxicity but only at exposure levels producing other toxic effects in the adult animal. |
| | Teratogenicity: | This product is not reported to produce teratogenic effects in humans. |
| | Reproductive Toxicity: | In a 2-year inhalation study, HFC-134A, at a concentration of 50,000 ppm, produced an increase in late-occurring benign testicular tumors, testicular hyperplasia and testicular weight in mice. The no-effect-level for this study was 10,000ppm. However, no change in reproductive performance was reported. |
| 11.7 | Irritancy of Product: | Slight |
| 11.8 | Biological Exposure Indices: | NE NE |
| 11.9 | Physician Recommendations: | Treat symptomatically. Because of possible disturbances of cardiac rhythm, catecholamine drugs, such as epinephrine, should only be used with special caution in situations of emergency life support. |



15.8

Other Requirements:

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Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards SDS Revision Date: 12/24/2015 12. ECOLOGICAL INFORMATION 12.1 Environmental Stability: There are no specific data available for this product. 122 Effects on Plants & Animals: There are no specific data available for this product. 1.1.1.2-Tetrafluoroethane: EC₅₀ (Daphnia magna, 48h): 980 mg/L; LC₅₀ (Rainbow trout, 96h): 450 mg/L 12.3 Effects on Aquatic Life: 13. DISPOSAL CONSIDERATIONS 13.1 Waste Disposal: Dispose of in accordance with federal, state, provincial and local regulations. Special Considerations: 13.2 14. TRANSPORTATION INFORMATION The basic description (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR. 49 CFR (GND): CONSUMER COMMODITY, ORM-D, DOT-SP 10232 - until 12/31/2020 UN3159, 1,1,1,2-TETRAFLUOROETHANE, 2.2 (LTD QTY, IP VOL ≤ 0.12 L) IATA (AIR): 14.2 UN3159, 1,1,1,2-TETRAFLUOROETHANE, 2.2 (LTD QTY, IP VOL ≤ 0.12 L) IMDG (OCN): 14.3 UN3159, 1,1,1,2-TETRAFLUOROETHANE, 2.2 (LTD QTY, IP VOL ≤ 0.12 L) TDGR (Canadian GND): UN3159, 1,1,1,2-TETRAFLUOROETHANE, 2.2 (LTD QTY, IP VOL ≤ 0.12 L); or MARK PACKAGE "LIMITED QUANTITY/QUANTITÉ LIMITÉE" or "LTD QTY/QUANT LTÉE" (IP VOL ≤ 0.12 L) 14.5 ADR/RID (EU): UN3159, 1,1,1,2-TETRAFLUOROETHANE, 2.2 (LTD QTY, IP VOL ≤ 0.12 L) 14.6 SCT (MEXICO): UN3159, 1,1,1,2-TETRAFLUOROETHANE, 2.2 (LTD QTY, IP VOL ≤ 0.12 L) ADGR (AUS): 14.7 UN3159, 1,1,1,2-TETRAFLUOROETHANE, 2.2 (LTD QTY, IP VOL ≤ 0.12 L) 15. REGULATORY INFORMATION SARA Reporting 15.1 This product does not contain any substances subject to SARA Title III, section 313 reporting requirements. Requirements 15.2 SARA Threshold Planning There are no specific Threshold Planning Quantities for the components of this product. Quantity: TSCA Inventory Status: 15.3 The components of this product are listed on the TSCA Inventory or are otherwise exempt. 15.4 CERCLA Reportable Quantity NA None of the ingredients are listed as Hazardous Air Pollutants (HAPs). None of the ingredients are listed as Toxic 15.5 Other Federal Requirements: Pollutants under the Clean Water Act (CWA). None of the ingredients are listed as Priority Pollutants under the Clean 15.6 Other Canadian Regulations: This product has been classified according to the hazard criteria of the CPR and the SDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List. WHMIS A (Compressed Gas) 15.7 State Regulatory Information: 1,1,1,2-Tetrafluoroethane is listed on the following state criteria lists: California Right-to-Know List; Minnesota Right-to Know list; Massachusetts Right to Know List of Chemicals; New Jersey Right to Know List 8:59 Appendix A. No other ingredients in this product, present in a concentration of 1.0% or greater, are listed on any of the following state criteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania

Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances List (WI).

The primary components of this product are not listed in Annex I of EU Directive 67/548/EEC: Irritant (Xi). <u>Risk Phrases</u> (R): 36 – Irritating to eyes. <u>Safety Phrases</u> (S): 2-25-26 – Keep out of reach of children. Avid contact with eyes. In case of contact with eyes, rinse immediately with

plenty of water and seek medical advice.



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| | | 16. OTHER INFO | RMATION | | | | |
|------|----------------------|--|---|--|--|--|--|
| 16.1 | Other Information: | WARNING. CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED. Wear protective gloves and eye protection. IF ON SKIN – Wash with soap and water. If skin irritation or a rash occurs – Get medical advice/attention. IF IN EYES - Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists: Get medical advice/attention. IF INHALED: Move to fresh air. If breathing has stopped, give artificial respiration and call physician immediately. Protect from sunlight. Do no expose to temperatures exceeding 50°C/122°F. Protect from sunlight. Store in a well-ventilated place. KEEP OUT OF REACH OF CHILDREN. USE AND STORE IN WELL VENTILATED AREAS. WARNING: Inhalation of concentrated levels can cause dizziness, ventricular arrhythmia or even death. Use only with adequate ventilation. Avoid prolonged breathing of vapors or spray. | | | | | |
| 16.2 | Terms & Definitions: | See last page of this Safety Data Sheet. | | | | | |
| 16.3 | Disclaimer: | government regulations must be reviewed for app Tools USA, Inc.'s knowledge, the information of accuracy, suitability or completeness is not guarar provided. The information contained herein relate | HA's Hazard Communication Standard, 29 CFR §1910.1200. Other licability to this product. To the best of ShipMate's & Harbor Freight ontained herein is reliable and accurate as of this date; however, need and no warranties of any type, either expressed or implied, are as only to the specific product(s). If this product(s) is combined with a considered. Data may be changed from time to time. Be sure to | | | | |
| 16.4 | Prepared for: | Harbor Freight Tools USA, Inc. 26541 Agoura Road Calabasas, CA 91302 USA Tel: +1 (805) 388-1000 http://www.harborfreight.com | HARBOR FREIGHT TOOLS Quality Tools at Ridiculously Low Prices | | | | |
| 16.5 | Prepared by: | ShipMate, Inc. P.O. Box 787 Sisters, Oregon 97759-0787 USA Tel: +1 (310) 370-3600 Fax: +1 (310) 370-5700 http://www.shipmate.com | | | | | |

HARBOR FREIGHT TOOLS

Quality Tools at Ridiculously Low Prices

SAFETY DATA SHEET

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Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards

SDS Revision: 5.0

SDS Revision Date: 12/24/2015

DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a SDS. Some of these that are commonly used include the following:

GENERAL INFORMATION:

| CAS No. | CAS No. Chemical Abstract Service Number | | | |
|-------------------------|---|--|--|--|
| EXPOSURE LIMITS IN AIR: | | | | |
| ACGIH | American Conference on Governmental Industrial Hygienists | | | |
| С | Ceiling Limit | | | |
| ES | Exposure Standard (Australia) | | | |
| IDLH | Immediately Dangerous to Life and Health | | | |
| OSHA | U.S. Occupational Safety and Health Administration | | | |
| PEL | Permissible Exposure Limit | | | |
| STEL | Short-Term Exposure Limit | | | |
| TLV | Threshold Limit Value | | | |
| TWΔ | Time Weighted Average | | | |

FIRST AID MEASURES:

| CPR | Cardiopulmonary resuscitation - method in which a person whose heart has |
|-----|---|
| | stopped receives manual chest compressions and breathing to circulate blood |
| | and provide oxygen to the body. |

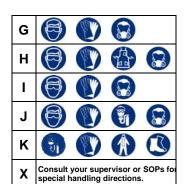
HMIS-III HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

| 0 | Minimal Hazard |
|---|-----------------|
| 1 | Slight Hazard |
| 2 | Moderate Hazard |
| 3 | Severe Hazard |
| 4 | Extreme Hazard |



PERSONAL PROTECTION RATINGS:

| Α | | | |
|---|--|--|--|
| В | | | |
| С | | | |
| D | | THE STATE OF THE S | |
| E | | | |
| F | | | |

























Airline Hood/Mask or SCBA

OTHER STANDARD ABBREVIATIONS:

| ML | Maximum Limit | | | |
|-------|------------------------------------|--|--|--|
| mg/m3 | mg/m3 milligrams per cubic meter | | | |
| NA | Not Available | | | |
| ND | Not Determined | | | |
| NE | Not Established | | | |
| NF | Not Found | | | |
| NR | No Results | | | |
| ppm | parts per million | | | |
| SCBA | Self-Contained Breathing Apparatus | | | |

NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

| FLAMMABILITY LIMITS IN AIR: | | | | | |
|-----------------------------|---|--|--|--|--|
| Autoignition | Minimum temperature required to initiate combustion in air with no other | | | | |
| Temperature | source of ignition | | | | |
| LEL | Lower Explosive Limit - lowest percent of vapor in air, by volume, that will | | | | |
| | explode or ignite in the presence of an ignition source | | | | |
| UEL | Upper Explosive Limit - highest percent of vapor in air, by volume, that will | | | | |
| | explode or ignite in the presence of an ignition source | | | | |

HAZARD RATINGS:

| | NC : 111 1 | | | | |
|-----------------|-----------------|--|--|--|--|
| 0 | Minimal Hazard | | | | |
| 1 Slight Hazard | | | | | |
| 2 | Moderate Hazard | | | | |
| 3 | Severe Hazard | | | | |
| 4 | Extreme Hazard | | | | |
| ACD | Acidic Acidic | | | | |
| ALK | Alkaline | | | | |
| COR | Corrosive | | | | |
| ₩ | Use No Water | | | | |
| ОХ | Oxidizer | | | | |
| TREFOIL | Radioactive | | | | |
| | | | | | |



OXICOLOGICAL INFORMATION:

| TOXICOLOGICAL INFO | ORWATION. |
|--|---|
| LD ₅₀ | Lethal Dose (solids & liquids) which kills 50% of the exposed animals |
| | S |
| LC ₅₀ | Lethal concentration (gases) which kills 50% of the exposed animal |
| ppm | Concentration expressed in parts of material per million parts |
| TD _{Io} | Lowest dose to cause a symptom |
| TCLo | Lowest concentration to cause a symptom |
| TD _{Io} , LD _{Io} , & LD _o or | Lowest dose (or concentration) to cause lethal or toxic effects |
| TC, TC _o , LC _{lo} , & LC _o | |
| IARC | International Agency for Research on Cancer |
| NTP | National Toxicology Program |
| RTECS | Registry of Toxic Effects of Chemical Substances |
| BCF | Bioconcentration Factor |
| TL _m | Median threshold limit |
| log K _{ow} or log K _{oc} | Coefficient of Oil/Water Distribution |

REGULATORY INFORMATION:

| WHMIS | Canadian Workplace Hazardous Material Information System |
|----------|---|
| DOT | U.S. Department of Transportation |
| TC | Transport Canada |
| EPA | U.S. Environmental Protection Agency |
| DSL | Canadian Domestic Substance List |
| NOHSC | National Occupational Health and Safety Commission (Australia) |
| NDSL | Canadian Non-Domestic Substance List |
| PSL | Canadian Priority Substances List |
| TSCA | U.S. Toxic Substance Control Act |
| EU | European Union (European Union Directive 67/548/EEC) |
| WGK | Wassergefährdungsklassen (German Water Hazard Class) |
| HMIS-III | National Paint & Coatings Association Hazardous Materials Identification System |

WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

| | 0 | (*) | (2) | (3) | \odot | (4) | | (R) |
|----|-----------|------------|------------|----------|------------|------------|-----------|----------|
| | Class A | Class B | Class C | Class D1 | Class D2 | Class D3 | Class E | Class F |
| Co | ompressed | Flammable | Oxidizing | Toxic | Irritation | Infectious | Corrosive | Reactive |

EC (67/548/EEC) INFORMATION:

| F.J. | | Z. | ¥ | | Ø X | × | × |
|-----------|-----------|-----------|---------|-----------|------------|----------|---------|
| О | E | F | N | 0 | Т | Xi | Xn |
| Corrosive | Explosive | Flammable | Harmful | Oxidizing | Toxic | Irritant | Harmful |

CLP/GHS (1272/2008/EC) PICTOGRAMS:

| | | | \Diamond | No. | | \Diamond | | ¥2 |
|-----------|-----------|----------|-------------|-----------|-------|-----------------------|------------------|-------------|
| GHS01 | GHS02 | GHS03 | GHS04 | GHS05 | GHS06 | GHS07 | GHS08 | GHS09 |
| Explosive | Flammable | Oxidizer | Pressurized | Corrosive | Toxic | Harmful Irritating | Health Hazard | Environment |