

SAFETY DATA SHEET.

Issuing date 07-Aug-2015

Revision Date 31-Oct-2017

Version 2.01

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name 65100 TUFF SOLV

Recommended use of the chemical and restrictions on use

Product code F02990

Product Type Extremely Flammable Aerosol
Synonyms None

Supplier's details

Recommended Use Degreaser.
Uses advised against No information available

Manufactured For:
Etterman Enterprises
1913 W Hwy 12
Willmar, MN 56201

Emergency telephone number
Chemical Emergency Phone Number Chemtrec 1-800-424-9300
Company Emergency Phone Number 800-852-7713

2. HAZARDS IDENTIFICATION

Classification

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable aerosols	Category 1
Gases under pressure	Compressed Gas

GHS Label elements, including precautionary statements

Emergency Overview

DANGER

Hazard Statements

Causes skin irritation

Causes eye irritation

Suspected of damaging fertility or the unborn child

Causes damage to organs (Blood, Central Nervous System, Central Vascular System, Eyes, Gastrointestinal Tract, Liver, Peripheral Nervous System, Reproductive System, Respiratory System, and Skin.)

May cause damage to organs (Central Nervous System, Eyes, Respiratory System, Skin, Blood, Central Vascular System, Gastrointestinal Tract, Liver, Peripheral Nervous System, and Reproductive System) through prolonged or repeated exposure.

May be fatal if swallowed and enters airways

Extremely Flammable Aerosol

Contains gas under pressure. may explode if heated



Appearance Clear

Physical state Aerosol

Odor Solvent

Precautionary Statements - Prevention

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood

Wear protective gloves/eye protection/face protection/protective clothing

Wash face, hands and any exposed skin thoroughly after handling.

Do not breathe dusts or mists.

Do not eat, drink or smoke when using this product.

Keep away from heat/sparks/open flames/hot surfaces.-No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use

Precautionary Statements - Response

Specific treatment (see first aid on this label)

IF EXPOSED: Call a POISON CENTER or doctor/physician

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

IF ON SKIN: Wash with plenty of soap and water.

Take off contaminated clothing and wash before reuse

If skin irritation occurs: Get medical advice/attention

IF SWALLOWED: Immediately call a poison center/doctor

Do NOT induce vomiting.

Precautionary Statements - Storage

Store locked up

Protect from sunlight. Store in a well-ventilated place

Do not expose to temperatures exceeding 122°F (50°C)

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None

Other information

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS # 110-54-3, HEXANE, MAY BE SUBSTITUTED FOR CAS # 64742-49-0, COMMERCIAL HEXANES.

Chemical Name	CAS-No	Weight %*
HEXANE	110-54-3	80-90
ETHANOL	64-17-5	1-10
CARBON DIOXIDE	124-38-9	1-10
METHANOL	67-56-1	1-10

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice	Under normal conditions of intended use, this product does not pose a risk to Health.
Eye contact	In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical advice.
Skin contact	Wash off immediately with plenty of water. Remove and wash contaminated clothing before re-use. Rinse immediately with plenty of water for 15 minutes and seek medical advice if skin irritation persists.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Artificial respiration and/or oxygen may be necessary. If breathing has stopped, contact emergency medical services immediately. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.
Ingestion	Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.

Most important symptoms/effects, acute and delayed

Main Symptoms Causes eye irritation. May cause skin and respiratory irritation. May cause drowsiness or dizziness. Harmful if swallowed and enters airways.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water fog. Dry chemical. Carbon dioxide (CO₂). Cool containers / tanks with water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. Extremely Flammable / Flammable.

Explosion Data

Sensitivity to Mechanical Impact none.

Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use shielding to protect fire-fighters from bursting containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Use with adequate ventilation. Keep can away from heat, flames, and all other sources of ignition. Keep can away from all sources of electricity such as electric motors and batteries. Do not spray on hot surfaces.

Environmental precautions

Environmental precautions Report spills as required by local and federal regulations. Do not flush into surface water or sanitary sewer system. Vapors can accumulate in low areas. Cover liquid and collect with an inert non-combustible material. Soak up with inert absorbant material. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains.

Methods and materials for containment and cleaning up

Methods for Containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Cover liquid and collect with an inert non-combustible material. Soak up with inert absorbant material. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Contain liquid and collect with an inert, non-combustible material. Soak up with inert absorbent material. Contain liquid and collect with an inert, non-combustible material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water. Prevent product from entering drains. Take precautionary measures against static discharges. Pick up and transfer to properly labeled containers. Use personal protective equipment. Dam up. Cover liquid spill with sand, earth, or other noncombustible absorbent material. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. After cleaning, flush away traces with water. Prevent product from entering drains.

7. HANDLING AND STORAGE

Precautions for safe handling**Advice on safe handling**

Irritating to eyes. . Contents under pressure. Do not puncture or incinerate cans. Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Use with adequate ventilation. to keep the exposure levels below the Occupational Exposure Limits.

Conditions for safe storage, including any incompatibilities**Technical measures/Storage conditions**

Keep away from heat and sources of ignition. Keep containers tightly closed in a dry and well-ventilated place. Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces, and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children. Store locked up. Keep container tightly closed. Keep out of the reach of children.

Incompatible products

Water, Acids, Organic materials, Chlorinated solvents, Aluminum, Phosphorus, Tin/Tin oxides, Zinc.

Aerosol Level

3

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
HEXANE 110-54-3	TWA: 50 ppm Skin - potential significant contribution to overall exposure by the cutaneous route	TWA: 500 ppm TWA: 1800 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 180 mg/m ³	IDLH: 1100 ppm TWA: 50 ppm TWA: 180 mg/m ³
ETHANOL 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³
CARBON DIOXIDE 124-38-9	STEL: 30000 ppm TWA: 5000 ppm	TWA: 5000 ppm TWA: 9000 mg/m ³ (vacated) TWA: 10000 ppm (vacated) TWA: 18000 mg/m ³ (vacated) STEL: 30000 ppm (vacated) STEL: 54000 mg/m ³	IDLH: 40000 ppm TWA: 5000 ppm TWA: 9000 mg/m ³ STEL: 30000 ppm STEL: 54000 mg/m ³
METHANOL 67-56-1	STEL: 250 ppm TWA: 200 ppm Skin - potential significant contribution to overall exposure by the cutaneous route	TWA: 200 ppm TWA: 260 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m ³ (vacated) STEL: 325 mg/m ³	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³

ACGIH: (American Conference of Governmental Industrial Hygienists)

OSHA: (Occupational Safety & Health Administration)

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls**Engineering Measures**

Ventilation systems. Use adequate ventilation to keep the exposure levels below the occupational exposure limits.

Individual protection measures, such as personal protective equipment**Eye/Face Protection**

Safety glasses with side-shields.

Skin and body protection

Chemical resistant apron. Protective gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state	Aerosol		
Appearance	Clear	Odor	Solvent
Color	Clear	Odor Threshold	

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	No information available	
Melting/freezing point	No information available	
Boiling point/boiling range		
Flash Point	-26 °C / -15 °F	(based on components)
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit		
lower flammability limit		
Vapor pressure		
Vapor density		
Specific Gravity	0.683	
Water solubility	Practically insoluble	
Partition coefficient: n-octanol/water		
Autoignition temperature	No information available	Not applicable
Decomposition temperature		
Viscosity	No information available	
Explosive properties		

Other information

VOC Content(%)	96.53
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10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to Avoid
Extremes of temperature and direct sunlight.

Incompatible Materials
Water, Acids, Organic materials, Chlorinated solvents, Aluminum, Phosphorus, Tin/Tin oxides, Zinc.

Hazardous Decomposition Products
Carbon oxides, Hydrocarbons, Fumes.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Inhalation	Exposure to high vapour concentrations may cause nervous systems effects such as headache, nausea, and dizziness. May cause respiratory tract irritation. Avoid inhaling vapors or mists. Exposure to high vapor concentrations may cause nervous systems effects such as headache, nausea, and dizziness. May cause irritation to respiratory tract. May cause respiratory irritation. May cause irritation of respiratory tract.
Eye contact	Irritating to eyes. Irritating to eyes.
Skin contact	May be irritating to skin. Repeated exposure may cause skin dryness or cracking. Causes eye and skin irritation. May cause respiratory irritation. Harmful or fatal if swallowed and enters airways. Avoid contact with skin.
Ingestion	Harmful and may be fatal if swallowed and enters airways and lungs. Aspiration into the lungs during swallowing may cause serious lung damage which is harmful and may be fatal.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
HEXANE 110-54-3	= 25 g/kg (Rat)	= 3000 mg/kg (Rabbit)	= 48000 ppm (Rat) 4 h
ETHANOL 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h
METHANOL 67-56-1	= 6200 mg/kg (Rat)	-	= 22500 ppm (Rat) 8 h

Information on toxicological effects

Symptoms	May cause eye, skin, and respiratory irritation. Harmful and may be fatal if swallowed and enters airways.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	May be irritating to skin.
Eye damage/irritation	Irritating to eyes.
Sensitization	None known.
Germ Cell Mutagenicity	Not acutely toxic. May be harmful if swallowed.
Carcinogenicity	There are no carcinogenic chemicals in this product.
Reproductive toxicity	Suspected of damaging fertility or the unborn child
Specific target organ systemic toxicity (single exposure)	Causes damage to Target Organs listed below.
Specific target organ systemic toxicity (repeated exposure)	May cause damage to organ (Eyes, Skin, Gastrointestinal Tract, Central Nervous System, Liver, Kidney, Lungs, Respiratory System, and Reproductive System).
Chronic toxicity	Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest.
Target Organ Effects	Eyes, Skin, Respiratory System, Central Nervous System, and Gastrointestinal Tract.
Aspiration hazard	May be harmful if swallowed and enters airways.

Numerical measures of toxicity - Product Information**Unknown Acute Toxicity**

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	5995 mg/kg
ATEmix (dermal)	2943 mg/kg
ATEmix (inhalation-dust/mist)	38.2 mg/l
ATEmix (inhalation-vapor)	392 mg/l

12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a severe marine pollutant according to DOT.

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
HEXANE 110-54-3	-	2.1 - 2.98 mg/L LC50 Pimephales promelas 96h flow-through	-	-
ETHANOL 64-17-5	-	12.0 - 16.0 mL/L LC50 Oncorhynchus mykiss 96h static 100 mg/L LC50 Pimephales promelas 96h static 13400 - 15100 mg/L LC50 Pimephales promelas 96h flow-through	-	9268 - 14221 mg/L LC50 Daphnia magna 48h 2 mg/L EC50 Daphnia magna 48h Static
METHANOL 67-56-1	-	28200 mg/L LC50 Pimephales promelas 96h flow-through 100 mg/L LC50 Pimephales promelas 96h static 19500 - 20700 mg/L LC50 Oncorhynchus mykiss 96h flow-through 18 - 20 mL/L LC50 Oncorhynchus mykiss 96h static 13500 - 17600 mg/L LC50 Lepomis macrochirus 96h flow-through	-	-

Persistence and degradability

Bioaccumulation

Chemical Name	log Pow
ETHANOL 64-17-5	-0.32
METHANOL 67-56-1	-0.77

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with federal, state, and local regulations. Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging

Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground

UN 1993, FLAMMABLE LIQUID, N.O.S.(XYLENE, ISOPROPYL ALCOHOL), 3, PG III
or
LIMITED QUANTITY

Marine Pollutant	This product contains a chemical which is listed as a severe marine pollutant according to DOT.
IATA	UN 1992, FLAMMABLE LIQUIDS, N.O.S.(DICHLOROMETHANE, METHANOL, TOLUENE),3,6.1,PGII
IMDG Marine pollutant	UN 1993, FLAMMABLE LIQUID, N.O.S.(XYLENE, ISOPROPYL ALCOHOL), 3, PG III This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
HEXANE	X	X	X	X	X	X	X	X
ETHANOL	X	X	X	X	X	X	X	X
CARBON DIOXIDE	X	X	X	X	X	X	X	X
METHANOL	X	X	X	X	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does contain a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 312:

Chemical Name	CAS-No	Weight %*	SARA 313 - Threshold Values %
HEXANE - 110-54-3	110-54-3	88.3119	1.0
METHANOL - 67-56-1	67-56-1	1.31287	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Star Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does contain substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
HEXANE 110-54-3	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
METHANOL 67-56-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
METHANOL - 67-56-1	Developmental 1-10%

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
HEXANE 110-54-3	X	X	X
ETHANOL 64-17-5	X	X	X
CARBON DIOXIDE 124-38-9	X	X	X
METHANOL 67-56-1	X	X	X

EPA Pesticide Registration Number Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

16. OTHER INFORMATION

NFPA	Health Hazard 2	Flammability 4	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 2*	Flammability 4	Physical Hazard 1	Personal protection B

Prepared By Regulator / Affairs
 Issuing date 07-Aug-2015
 Revision Date 31-Oct-2017

Revision Note
 (M)SDS sections updated

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet