acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

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RONSONOL

1 Identification

Product identifier

Trade name: Ronsonol Lighter Fuel

· Recommended use and restriction on use

· Recommended use: Fuel

· Restrictions on use: Contact manufacturer/supplier

 Details of the supplier of the Safety Data Sheet
 Manufacturer/Supplier: Zippo Manufacturing Company 33 Barbour Street

Bradford, PA 16701 Phone: 814-368-2700

• Emergency telephone number: ChemTel Inc.

(800)255-3924 (North America) +1 (813)248-0585 (International)

2 Hazard(s) identification

· Classification of the substance or mixture Flam. Lig. 2 H225 Highly flammable liquid and vapor. Skin Irrit. 2 H315 Causes skin irritation. STOT SE 3 H336 May cause drowsiness or dizziness. Asp. Tox. 1 H304 May be fatal if swallowed and enters airways. · Label elements · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). · Hazard pictograms: GHS02 GHS07 GHS08 Signal word: Danger · Hazard statements: H225 Highly flammable liquid and vapor. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H304 May be fatal if swallowed and enters airways. · Precautionary statements: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P210 Keep container tightly closed. P233 Ground/bond container and receiving equipment. P240 P241 Use explosion-proof electrical/ventilating/lighting/equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P261 Avoid breathing mist/vapors/spray.

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D064	(Cont'd. of page 1)
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves and eye protection.
P301+P310	If swallowed: Immediately call a poison center/doctor.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a poison center/doctor if you feel unwell.
P331	Do NOT induce vomiting.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use foam, powder, or carbon dioxide for extinction.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
· NFPA ratings (sca	0
Health =	•
Fire = 4 Reactiv	
· HMIS-ratings (sca	ale 0 - 4)
HEALTH 1 Health	ו = 1
FIRE 4 Fire =	4
Reactivity 0 Reactivity	ivity = 0
[·] Other hazards ⊺	here are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:

68410-97-9 Distillates (petroleum), light distillate hydrotreating process, low-boiling Flam. Liq. 2, H225 Asp. Tox. 1, H304 Asp. Tox. 1, H304

🎸 Skin Irrit. 2, H315; STOT SE 3, H336

• Additional information:

For the wording of the listed Hazard Statements, refer to section 16.

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

4 First-aid measures

• Description of first aid measures

After inhalation:

Supply fresh air; consult doctor in case of complaints.

Provide oxygen treatment if affected person has difficulty breathing.

In case of unconsciousness place patient stably in side position for transportation.

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After skin contact:	
Immediately remove any clothing soiled by the product.	
Immediately wash with water and soap and rinse thoroughly.	
If skin irritation is experienced, consult a doctor.	
After eye contact:	
Protect unharmed eye.	
Remove contact lenses if worn.	
Rinse opened eye for several minutes under running water. If symptoms persist, cons	ult a doctor.
· After swallowing:	
Rinse out mouth and then drink plenty of water.	
Do not induce vomiting; immediately call for medical help.	
A person vomiting while lying on their back should be turned onto their side.	
• Most important symptoms and effects, both acute and delayed:	
Breathing difficulty	
Coughing	
Dizziness	
Gastric or intestinal disorders when ingested.	
Irritant to skin and mucous membranes.	
· Danger:	
Vapors have narcotic effect.	
May be fatal if swallowed and enters airways.	
Indication of any immediate medical attention and special treatment needed:	
If swallowed, gastric irrigation with added, activated carbon.	
If swallowed or in case of vomiting, danger of entering the lungs.	
Monitor circulation, possible shock treatment.	
If necessary oxygen respiration treatment.	
Later observation for pneumonia and pulmonary edema.	
If medical advice is needed, have product container or label at hand.	

5 Fire-fighting measures

[•] Extinguishing media

• Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

• For safety reasons unsuitable extinguishing agents: Water stream.

Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

In certain fire conditions, traces of other toxic gases cannot be excluded.

[·] Advice for firefighters

· Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

• Additional information: Cool endangered containers with water fog.

6 Accidental release measures

[•] Personal precautions, protective equipment and emergency procedures

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Ensure adequate ventilation. Wear protective clothing.

Particular danger of slipping on leaked/spilled product.

Keep away from ignition sources.

Protect from heat.

Environmental precautions

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Methods and material for containment and cleaning up

Absorb liquid components with liquid-binding material.

Send for recovery or disposal in suitable receptacles.

Reference to other sections

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

· Handling

• **Precautions for safe handling:** Use only in well ventilated areas.

Prevent formation of aerosols.

Keep receptacles tightly sealed.

Information about protection against explosions and fires:

Protect from heat.

Protect against electrostatic charges.

Flammable gas-air mixtures may be formed in empty containers/receptacles.

[•] Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

Store in a cool location.

Use only receptacles specifically permitted for this substance/product.

Information about storage in one common storage facility:

Store away from oxidizing agents.

Store away from foodstuffs.

· Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

• Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

· Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

• Exposure controls

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	(Contid of page 4)
Keep away from foodstuffs, beverage Wash hands before breaks and at the Avoid close or long term contact with Keep ignition sources away - Do not : Engineering controls: Provide adeq Breathing equipment: Not required under normal conditions Use suitable respiratory protective de For spills, respiratory protection may Protection of hands: Not required under normal conditions Wear protective gloves to handle con	easures: or handling chemicals should be followed. es and feed. e end of work. the skin. smoke. quate ventilation. s of use. evice when aerosol or mist is formed. be advisable.
Safety glasses	
 Body protection: Not required under Limitation and supervision of example. 	
No relevant information available. Risk management measures Se	e Section 7 for additional information.
No relevant information available. Risk management measures Se 9 Physical and chemical prope	e Section 7 for additional information.
No relevant information available. Risk management measures Se	e Section 7 for additional information.
No relevant information available. • Risk management measures Se 9 Physical and chemical prope • Information on basic physical a • Appearance: Form: Color: • Odor:	e Section 7 for additional information. erties Ind chemical properties Liquid According to product specification Petroleum-like
No relevant information available. Risk management measures Se 9 Physical and chemical prope Information on basic physical a Appearance: Form: Color: Odor: Odor threshold: PH-value: Melting point/Melting range:	e Section 7 for additional information. erties Ind chemical properties Liquid According to product specification Petroleum-like Not determined. Not determined. Not determined. Not determined.
No relevant information available. Risk management measures Se 9 Physical and chemical prope Information on basic physical a Appearance: Form: Color: Odor: Odor: PH-value: Melting point/Melting range: Boiling point/Boiling range:	e Section 7 for additional information. erties Ind chemical properties Liquid According to product specification Petroleum-like Not determined. Not determined. Not determined. > 35 °C (>95 °F)
No relevant information available. • Risk management measures Se 9 Physical and chemical prope • Information on basic physical a • Appearance: Form: Color: • Odor: • Odor: • Odor threshold: • pH-value: • Melting point/Melting range: • Boiling point/Boiling range: • Flash point:	e Section 7 for additional information. erties and chemical properties Liquid According to product specification Petroleum-like Not determined. Not determined. Not determined. > 35 °C (>95 °F) <-6.5 °C (<20.3 °F)
No relevant information available. Risk management measures Se 9 Physical and chemical prope Information on basic physical a Appearance: Form: Color: Odor: Odor threshold: PH-value: Melting point/Melting range: Boiling point/Boiling range: Flash point: Flammability (solid, gaseous):	e Section 7 for additional information. erties Ind chemical properties Liquid According to product specification Petroleum-like Not determined. Not determined. Not determined. > 35 °C (>95 °F) <-6.5 °C (<20.3 °F) Not applicable.
No relevant information available. Risk management measures Se 9 Physical and chemical prope Information on basic physical a Appearance: Form: Color: Odor: Odor threshold: PH-value: Melting point/Melting range: Boiling point/Boiling range: Flash point: Flammability (solid, gaseous): Decomposition temperature:	e Section 7 for additional information. erties Ind chemical properties Liquid According to product specification Petroleum-like Not determined. Not determined. Not determined. > 35 °C (>95 °F) <-6.5 °C (<20.3 °F) Not applicable. Not determined. Product is not explosive. However, formation of explosive air/

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		(Cont'd. of page
Upper:	Not determined.	
· Vapor pressure:	Not determined.	
· Density at 20 °C (68 °F):	0,7 ± 0,05 g/cm³ (5.84 lbs/gal) (Oceniti)	
Relative density:	Not determined.	
· Vapor density:	Not determined.	
Evaporation rate at 20 °C (68 °F):	> 1 (Voda = 1)	
· Solubility in / Miscibility with		
Water:	Fully miscible.	
· Partition coefficient (n-octanol/wate	r): Not determined.	
·Viscosity		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
• Other information	No relevant information available.	

10 Stability and reactivity

· Reactivity: No relevant information available.

Chemical stability:

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Possibility of hazardous reactions

Forms explosive gas mixture with air.

Can react violently with oxygen rich (oxidizing) material. Danger of Explosion.

[·] Conditions to avoid

Keep ignition sources away - Do not smoke.

Store away from oxidizing agents.

· Incompatible materials No relevant information available.

· Hazardous decomposition products Carbon monoxide and carbon dioxide

11 Toxicological information

[·] Information on toxicological effects

· Acute toxicity:

- · LD/LC50 values that are relevant for classification: None.
- · Primary irritant effect:
- · On the skin: Irritant to skin and mucous membranes.
- · On the eye: Based on available data, the classification criteria are not met.
- · Sensitization: Based on available data, the classification criteria are not met.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

• NTP (National Toxicology Program):

None of the ingredients are listed.

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	(Cont'd. of pa
OSHA-Ca (C	ccupational Safety & Health Administration):
None of the i	ngredients are listed.
	ute(s) of exposure:
Ingestion.	
Inhalation.	
Eye contact.	
Skin contact.	
	s (acute toxicity, irritation and corrosivity):
	if swallowed and enters airways.
Irritating to s	
	rowsiness or dizziness.
	ose toxicity: No relevant information available.
	utagenicity: Based on available data, the classification criteria are not met. city: Based on available data, the classification criteria are not met.
	e toxicity: Based on available data, the classification criteria are not met.
	exposure: May cause drowsiness or dizziness.
	ted exposure: Based on available data, the classification criteria are not met.
	IEU EXDUSUIE. DASEU UL AVAIIADIE UAIA. ILE GIASSIIGAIIULI GLIELIA ALE HULLIEL.
Asniration h	
-	azard: May be fatal if swallowed and enters airways.
Ecologica	
Ecologica Toxicity	azard: May be fatal if swallowed and enters airways.
Ecologica Toxicity Aquatic toxi	azard: May be fatal if swallowed and enters airways. I information city Toxic to aquatic life with long lasting effects.
Ecologica Toxicity Aquatic toxi Persistenc	azard: May be fatal if swallowed and enters airways. I information city Toxic to aquatic life with long lasting effects. and degradability Not easily biodegradable
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Ecologica Toxicity Aquatic toxi Persistenc Bioaccumul Mobility in s Additional General not This stateme Do not allow	azard: May be fatal if swallowed and enters airways. I information city Toxic to aquatic life with long lasting effects. and degradability Not easily biodegradable ative potential: No relevant information available. oil: No relevant information available. ecological information es:
Ecologica Toxicity Aquatic toxi Persistenc Bioaccumul Mobility in s Additional General not This stateme Do not allow system.	azard: May be fatal if swallowed and enters airways. I information city Toxic to aquatic life with long lasting effects. and degradability Not easily biodegradable ative potential: No relevant information available. oil: No relevant information available. ecological information es: nt was deduced from the properties of the single components. undiluted product or large quantities of it to reach ground water, water course or sev
Ecologica Toxicity Aquatic toxi Persistenc Bioaccumul Mobility in s Additional General not This stateme Do not allow system. Due to avail	azard: May be fatal if swallowed and enters airways. I information city Toxic to aquatic life with long lasting effects. and degradability Not easily biodegradable ative potential: No relevant information available. oil: No relevant information available. ecological information es: nt was deduced from the properties of the single components. undiluted product or large quantities of it to reach ground water, water course or sev able data on eliminability/decomposition and bioaccumulation potential prolonged
Ecologica Toxicity Aquatic toxi Persistenc Bioaccumul Mobility in s Additional General not This stateme Do not allow system. Due to avail damage of th	azard: May be fatal if swallowed and enters airways. I information city Toxic to aquatic life with long lasting effects. and degradability Not easily biodegradable ative potential: No relevant information available. cological information es: nt was deduced from the properties of the single components. undiluted product or large quantities of it to reach ground water, water course or sev able data on eliminability/decomposition and bioaccumulation potential prolonged e environment can not be excluded.
Ecologica Toxicity Aquatic toxi Persistenc Bioaccumul Mobility in s Additional General not This stateme Do not allow system. Due to avail damage of th Results of	azard: May be fatal if swallowed and enters airways. I information city Toxic to aquatic life with long lasting effects. and degradability Not easily biodegradable ative potential: No relevant information available. oil: No relevant information available. ecological information es: nt was deduced from the properties of the single components. undiluted product or large quantities of it to reach ground water, water course or sev able data on eliminability/decomposition and bioaccumulation potential prolonged e environment can not be excluded. PBT and vPvB assessment
Ecologica Toxicity Aquatic toxi Persistenc Bioaccumul Mobility in s Additional General not This stateme Do not allow system. Due to avail damage of th Results of PBT: Not ap	azard: May be fatal if swallowed and enters airways. I information city Toxic to aquatic life with long lasting effects. and degradability Not easily biodegradable ative potential: No relevant information available. oil: No relevant information available. ecological information es: nt was deduced from the properties of the single components. undiluted product or large quantities of it to reach ground water, water course or sev able data on eliminability/decomposition and bioaccumulation potential prolonged e environment can not be excluded. PBT and vPvB assessment blicable.
Ecologica Toxicity Aquatic toxi Persistenc Bioaccumul Mobility in s Additional General not This stateme Do not allow system. Due to avail damage of th Results of PBT: Not ap vPvB: Not a	azard: May be fatal if swallowed and enters airways.
Ecologica Toxicity Aquatic toxi Persistenc Bioaccumul Mobility in s Additional General not This stateme Do not allow system. Due to avail damage of th Results of PBT: Not ap vPvB: Not a	azard: May be fatal if swallowed and enters airways. I information city Toxic to aquatic life with long lasting effects. and degradability Not easily biodegradable ative potential: No relevant information available. oil: No relevant information available. ecological information es: nt was deduced from the properties of the single components. undiluted product or large quantities of it to reach ground water, water course or sev able data on eliminability/decomposition and bioaccumulation potential prolonged e environment can not be excluded. PBT and vPvB assessment blicable.

· Waste treatment methods

· Recommendation:

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as

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hazardous.

[·] Uncleaned packagings

• Recommendation: Disposal must be made according to official regulations.

· Recommended cleansing agent: Water, if necessary with cleansing agents.

UN-Number DOT, ADR, IMDG, IATA	UN1268
UN proper shipping name	
Limited Quantity for packages (0.3 gal).	e less than 30 kg (66 lb) and inner packagings less than 1 L
DOT, IATA ADR, IMDG	Petroleum distillates, n.o.s. PETROLEUM DISTILLATES, N.O.S.
Transport hazard class(es)	
DOT	
Class Label	3 Flammable liquids 3
ADR	3
	
Class Label	3 (F1) Flammable liquids 3
	5
Class Label	3 Flammable liquids 3
Packing group DOT, ADR, IMDG, IATA	II
[·] Environmental hazards	Product contains environmentally hazardo substances: Distillates (petroleum), light distilla hydrotreating process, low-boiling, Distillat (petroleum), light distillate hydrotreating process, low

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_		(Cont'd. of page 8)
	boiling	
 Special precautions for user Danger code (Kemler): EMS Number: 	Warning: Flammable liquids 33 F-E,S-E	
 Transport in bulk according to Annex MARPOL73/78 and the IBC Code 	k II of Not applicable.	

15 Regulatory information	
 Safety, health and environmental re mixture United States (USA) SARA 	gulations/legislation specific for the substance or
· Section 302 (extremely hazardous substa	nces):
None of the ingredients are listed.	
· Section 355 (extremely hazardous substa	nces):
None of the ingredients are listed.	
· Section 313 (Specific toxic chemical listing	ngs):
None of the ingredients are listed.	
· TSCA (Toxic Substances Control Act)	
All ingredients are listed.	
· Proposition 65 (California)	
· Chemicals known to cause cancer:	
None of the ingredients are listed.	
· Chemicals known to cause reproductive	toxicity for females:
None of the ingredients are listed.	
· Chemicals known to cause reproductive	toxicity for males:
None of the ingredients are listed.	
· Chemicals known to cause developmenta	al toxicity:
None of the ingredients are listed.	
· EPA (Environmental Protection Agency):	
None of the ingredients are listed.	
· IARC (International Agency for Research	on Cancer):
None of the ingredients are listed.	
· NIOSH-Ca (National Institute for Occupat	onal Safety and Health):
None of the ingredients are listed.	
· Canadian Domestic Substances List (DSI	_):
All ingredients are listed.	

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16 Other information
This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
Date of preparation / last revision January 18, 2018 / -
 Abbreviations and acronyms: LDLo: Lowest Lethal Dose Observed ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistant, Bio-accumulable, Toxic vPvB: very Persistent and very Bioaccumulative Flam, Liq. 2: Flammable liquids – Category 2 Strott SE: Specific target organ toxicity (single exposure) – Category 3 Asp. Tox. 1: Aspiration hazard – Category 1 Sources Website, European Chemicals Agency (echa.europa.eu) Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/ overview/home.do) Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org) Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6 Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5. Safety Data Sheets, Individual Manufacturers
SDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtelinc.com