SAFETY DATA SHEET	HOLLYFRONTIER
SUNPAR 110 000003009528	SPECIALTY PRODUCTS AN HF SINCLAIR BRAND
Version 2.2	Revision Date 2023/03/29 Print Date 2023/03/29
SECTION 1. IDENTIFICATION	
Product name :	SUNPAR 110
Synonyms :	Product code: 100748
Manufacturer or supplier's det Telephone :	tails HollyFrontier Specialty Products 1700 South Union Avenue Tulsa OK 74107 United States Customer Service: (800) 456-4786
Emergency telephone number	r
Emergency telephone num- : ber	CHEMTREC: 1-800-424-9300; CCN: 999116 Poison Control Centre: Consult local telephone directory for emergency number(s).
Recommended use of the che	mical and restrictions on use
Recommended use :	Process Oil
Prepared by :	Product Safety
SECTION 2. HAZARDS IDENTIFICA GHS classification in accordar 1910.1200) Aspiration hazard :	ATION nce with the OSHA Hazard Communication Standard (29 CFR Category 1
GHS label elements Hazard pictograms :	
Signal word :	Danger
Hazard statements :	May be fatal if swallowed and enters airways.
Precautionary statements :	Response: IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Do NOT induce vomiting.
	Storage:
	Store locked up.
	Disposal: Dispose of contents/ container to an approved waste disposal
	plant.
Other hazards	

Other hazards

None known.

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IARC	No component of this product press or equal to 0.1% is identified as pro firmed human carcinogen by IARC.	bable, possible or con-
OSHA	No component of this product prese equal to 0.1% is on OSHA's list of r	5
NTP	No component of this product prese equal to 0.1% is identified as a kno by NTP.	5

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

CAS-No.	Concentration (% w/w)
64742-65-0	65 - 80
64742-56-9	0 - 35
64742-55-8	0 - 35
	64742-65-0 64742-56-9

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

If inhaled :	Move to fresh air. Artificial respiration and/or oxygen may be necessary. Seek medical advice.
In case of skin contact :	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Wash clothing before reuse. Seek medical advice.
In case of eye contact :	Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
If swallowed :	Rinse mouth with water. DO NOT induce vomiting unless directed to do so by a physi- cian or poison control center. Never give anything by mouth to an unconscious person. Seek medical advice.

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Most important symptoms and effects, both acute and delayed	:	First aider needs to protect himself.	
Notes to physician	:	Treat symptomatically.	

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment.
Unsuitable extinguishing media	:	Do NOT use water jet.
Specific hazards during fire- fighting	:	Cool closed containers exposed to fire with water spray.
Hazardous combustion prod- ucts	:	Carbon oxides (CO, CO2), smoke and irritating vapours as products of incomplete combustion.
Further information	:	Prevent fire extinguishing water from contaminating surface water or the ground water system.
Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if nec- essary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- : tive equipment and emer- gency procedures	Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Material can create slippery conditions. Mark the contaminated area with signs and prevent access to unauthorized personnel. Only qualified personnel equipped with suitable protective equipment may intervene.
Environmental precautions :	Do not allow uncontrolled discharge of product into the envi- ronment.
Methods and materials for : containment and cleaning up	Prevent further leakage or spillage if safe to do so. Remove all sources of ignition. Soak up with inert absorbent material. Non-sparking tools should be used. Ensure adequate ventilation. Contact the proper local authorities.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	None known.
Advice on safe handling	:	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the ap-

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	plication area. Use only with adequate ventilat In case of insufficient ventilation equipment. Avoid contact with skin, eyes ar Do not ingest. Keep away from heat and source Keep container closed when no Do not handle at temperatures priate protective equipment.	n, wear suitable respiratory nd clothing. ces of ignition. t in use.
Conditions for safe storage	: Store in original container. Containers which are opened m kept upright to prevent leakage. Keep in a dry, cool and well-ver Keep in properly labelled contai To maintain product quality, do light.	ntilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Distillates (petroleum), solvent- dewaxed heavy paraffinic;	64742-65-0	TWA (Inhal- able particu-	5 mg/m3	ACGIH
Baseoil — unspecified		late matter)		
·		TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Mist)	5 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
Distillates (petroleum), solvent-	64742-56-9	TWA (Inhal-	5 mg/m3	ACGIH
dewaxed light paraffinic;		able particu-		
Baseoil — unspecified		late matter)		
		TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Mist)	5 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
Distillates (petroleum), hy-	64742-55-8	TWA (Inhal-	5 mg/m3	ACGIH
drotreated light paraffinic;		able particu-		
Baseoil — unspecified		late matter)		
		TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Mist)	5 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL

Components with workplace control parameters

Engineering measures

: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

:

Respiratory protection

Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates

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		that exposures are within recomm Respirator selection must be base exposure levels, the hazards of th working limits of the selected resp	ed on known or anticipated e product and the safe
Filter type	:	organic vapour filter	
Hand protection Material	:	neoprene, nitrile, polyvinyl alcohol	l (PVA), Viton [®] .
Remarks	:	Chemical-resistant, impervious glo approved standard should be worn chemical products if a risk assess essary.	n at all times when handling
Eye protection	:	Wear face-shield and protective so problems.	uit for abnormal processing
Skin and body protection	:	Choose body protection in relation tration and amount of dangerous s cific work-place.	
Protective measures	:	Wash contaminated clothing before	re re-use.
Hygiene measures	:	Remove and wash contaminated of ing the inside, before re-use. Wash face, hands and any expose handling.	

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	Colourless to light amber.
Odour	:	slight
Odour Threshold	:	No data available
рН	:	Not applicable
Pour point	:	-18 °C (-0.40 °F)
Boiling point/boiling range	:	293 - 492 °C (559 - 918 °F)
Flash point	:	186 °C (367 °F) Method: Cleveland open cup
Fire Point	:	No data available
Evaporation rate	:	No data available
Flammability	:	Remarks: No data available
Auto-Ignition Temperature	:	669 °F / 354 °C

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Upper explosion limit / Upper flammability limit	:	No data available	
Lower explosion limit / Lower flammability limit	:	No data available	
Vapour pressure	:	< 0.00011 kPa (100.0 °F / 37.8 °C)	
Relative vapour density	:	No data available	
Relative density	:	0.86 (61 °F / 16 °C)	
Density	:	No data available	
Solubility(ies) Water solubility	:	insoluble	
Partition coefficient: n- octanol/water	:	log Pow: 2 - 6	
Viscosity Viscosity, kinematic	:	20.5 cSt (104 °F / 40 °C)	
Explosive properties	:	Do not pressurize, cut, weld, braze, so pose containers to heat or sources of i	-
Molecular weight	:	365 g/mol	

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reac- tions	:	Hazardous polymerisation does not occur. Stable under normal conditions.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Reactive with oxidising agents.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous de- composition products should not be produced.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact Ingestion Inhalation Skin contact

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Acute toxicity			
Product:			
Acute oral toxicity	:	Remarks: No data available	
Acute inhalation toxicity	:	Assessment: The substance or mi tion toxicity Remarks: No data available	ixture has no acute inhala
Acute dermal toxicity	:	Remarks: No data available	
Components:			
	lvent	dewaxed heavy paraffinic; Base	oil — unspecified:
Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg,	
Acute inhalation toxicity	:	LC50 (Rat): > 5.53 mg/l	
		Exposure time: 4 h	
		Test atmosphere: dust/mist	
Acute dermal toxicity	:	LD50 (Rabbit): > 2,000 mg/kg,	
Distillates (petroleum), so	lvent	dewaxed light paraffinic; Baseoi	I — unspecified:
Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg,	
Acute inhalation toxicity	:	LC50 (Rat): > 5.53 mg/l	
		Exposure time: 4 h	
		Test atmosphere: dust/mist	
Acute dermal toxicity	:	LD50 (Rabbit): > 2,000 mg/kg,	
Distillates (petroleum), hy	drotre	eated light paraffinic; Baseoil —	unspecified:
Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg,	
Acute inhalation toxicity	:	LC50 (Rat): 3.9 mg/l	
		Exposure time: 4 h	
		Test atmosphere: dust/mist	
Acute dermal toxicity	:	LD50 (Rat): > 2,000 mg/kg,	
Skin corrosion/irritation			
Product:			
Remarks	:	Non-irritating to the skin. Heated r burns.	naterial can cause therm
Serious eye damage/eye i	rritati	on	
Product:			
Remarks	:	Non-irritating to the eyes. Heated burns.	material can cause therm

Product:

Exposure routes: Skin contact



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Species: Guinea pig Result: Not a skin sensit Remarks: No evidence c		
Germ cell mutagenicity		
Product:		
Genotoxicity in vitro	: Remarks: Not considered to be a g	erm cell mutagen.
Carcinogenicity		
Product:		
Remarks	: The mineral oils in the product con 346). Not considered to be carcino	
Reproductive toxicity		
Product:		
Effects on fertility	: Remarks: Not considered to be tox tem.	ic to the reproductive sys-
Effects on foetal develop- ment	: Remarks: Not considered to be ter	atogenic.
STOT - single exposure		
Product:		
Remarks	: Acute exposure studies show no e	vidence of systemic toxicity.
STOT - repeated exposure		
Product:		
Remarks	: Repeat dose toxicity data shows n toxicity.	o evidence of target organ
Aspiration toxicity		
<u>Product:</u> May be fatal if swallowed and	enters airways.	
Further information		
Product:		
Remarks	: Prolonged or repeated contact can irritation, cracking and/or dermatitie	

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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity					
Product:					
Toxicity to fish	:	Remarks: No data available			
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: No data available			
Toxicity to algae/aquatic plants	:	Remarks: No data available			
Toxicity to microorganisms	:	Remarks: No data available			
Components:					
Distillates (petroleum), solv	ent	-dewaxed heavy paraffinic; Baseoil — unspecified :			
Toxicity to fish	:	LC50 (Fish): > 100 mg/l Exposure time: 96 h			
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia (water flea)): > 100 mg/l Exposure time: 48 h			
Toxicity to algae/aquatic plants	:	EC50 (algae): > 100 mg/l Exposure time: 72 h			
Toxicity to daphnia and other aquatic invertebrates (Chron-ic toxicity)		NOEC (Daphnia (water flea)): > 1 mg/l Exposure time: 21 d			
Distillates (petroleum), solv	ent	-dewaxed light paraffinic; Baseoil — unspecified :			
Toxicity to fish	:	LC50 (Fish): > 100 mg/l Exposure time: 96 h			
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia (water flea)): > 100 mg/l Exposure time: 48 h			
Toxicity to algae/aquatic plants	:	EC50 (algae): > 100 mg/l Exposure time: 72 h			
Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified :					
Toxicity to fish		LC50 (Fish): > 100 mg/l			
loxicity to fish	:	Exposure time: 96 h			
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia (water flea)): > 100 mg/l Exposure time: 48 h			
Toxicity to algae/aquatic plants	:	EC50 (algae): > 100 mg/l Exposure time: 72 h			
Persistence and degradabil	ity				
Product:					

Biodegradability	:	Result: Inherently biodegradable.
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Bioaccumulative potentia No data available Mobility in soil No data available Other adverse effects	1	
Product: Additional ecological infor- mation	: This product has no known ecotoxicological effects.	
SECTION 13. DISPOSAL CON	SIDERATIONS	

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Disposal methods		
Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil. Offer surplus and non-recyclable solutions to a licensed dis- posal company. Waste must be classified and labelled prior to recycling or disposal. Send to a licensed waste management company. Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.
Contaminated packaging	:	Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

National Regulations

49 CFR Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Aspiration hazard

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SARA 313

: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Water Act

Not applicable

US State Regulations

Massachusetts Right To Know

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:	64742-65-0
Distillates (petroleum), solvent-dewaxed light paraffinic;	64742-56-9
Baseoil — unspecified: Distillates (petroleum), hydrotreated light paraffinic; Baseoil –	- 64742-55-8
unspecified:	

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Pennsylvania Right To Know

Distillates (petroleum), solvent-dewaxed heavy paraffinic;	64742-65-0
Baseoil — unspecified	
Distillates (petroleum), solvent-dewaxed light paraffinic;	64742-56-9
Baseoil — unspecified	
Distillates (petroleum), hydrotreated light paraffinic; Baseoil —	64742-55-8
unspecified	
Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil — unspecified Distillates (petroleum), hydrotreated light paraffinic; Baseoil —	0

New Jersey Right To Know

Distillates (petroleum), solvent-dewaxed heavy paraffinic;	64742-65-0
Baseoil — unspecified	
Distillates (petroleum), solvent-dewaxed light paraffinic;	64742-56-9
Baseoil — unspecified	
Distillates (petroleum), hydrotreated light paraffinic; Baseoil —	64742-55-8
unspecified	

New York City Hazardous Substances

Distillates (petroleum), solvent-dewaxed heavy paraffinic;	64742-65-0
Baseoil — unspecified	
Distillates (petroleum), solvent-dewaxed light paraffinic;	64742-56-9
Baseoil — unspecified	
Distillates (petroleum), hydrotreated light paraffinic; Baseoil —	64742-55-8
unspecified	

California Prop. 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. For more information go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:					
TSCA	:	All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.			
AIIC	:	On the inventory, or in compliance with the inventory			
DSL	:	On the inventory, or in compliance with the inventory			
ENCS	:	On the inventory, or in compliance with the inventory			

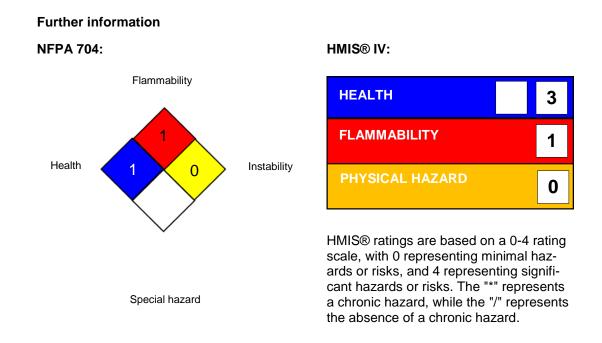
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KECI	:	On the inventory, or in compliance with	the inventory
PICCS	:	On the inventory, or in compliance with	the inventory
IECSC	:	On the inventory, or in compliance with	the inventory
NZIoC	:	On the inventory, or in compliance with	the inventory
EINECS	:	On the inventory, or in compliance with	the inventory
TCSI	:	On the inventory, or in compliance with	the inventory

SECTION 16. OTHER INFORMATION



Full text of other abbreviations

ACGIH NIOSH REL OSHA P0	:	USA. ACGIH Threshold Limit Values (TLV) USA. NIOSH Recommended Exposure Limits USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim- its for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA P0 / TWA	:	8-hour time weighted average
OSHA Z-1 / TWA	:	8-hour time weighted average

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AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Prepared by	: Product Safet	ty
Revision Date	: 2023/03/29	
Date format	: yyyy/mm/dd	

The information is considered as correct, but not exhaustive, and will be used only as a guide, which is based in the current knowledge of the substance or mixture, and is applicable to proper safety precautions for the product.

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

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