

# SAFETY DATA SHEET

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Revision Number 4

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

## 1. Identification

**Product Name** Hexanes

**Cat No. :** H334-1, H334-4

**CAS No** 92112-69-1  
**Synonyms** Hex

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.

### Details of the supplier of the safety data sheet

#### Company

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

#### **Emergency Telephone Number**

CHEMTREC®, Inside the USA: 800-424-9300  
CHEMTREC®, Outside the USA: 001-703-527-3887

## 2. Hazard(s) identification

### **Classification**

This chemical is considered hazardous according to [US] OSHA (29 CFR 1910.1200, 2024)

Flammable liquids	Category 2
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system, Central nervous system (CNS).	
Specific target organ toxicity - (repeated exposure)	Category 1
Target Organs - Respiratory system, Heart.	
Aspiration Toxicity	Category 1

### Label Elements

**Signal Word**  
Danger

**Hazard Statements**

Highly flammable liquid and vapor  
May be fatal if swallowed and enters airways  
Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation  
May cause drowsiness or dizziness  
Suspected of damaging fertility  
Causes damage to organs through prolonged or repeated exposure

**Precautionary Statements****Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Wash face, hands and any exposed skin thoroughly after handling  
Wear eye/face protection  
Do not breathe dust/fume/gas/mist/vapors/spray  
Do not eat, drink or smoke when using this product  
Use only outdoors or in a well-ventilated area  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
Keep container tightly closed  
Ground and bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting equipment  
Keep cool  
Wear protective gloves/protective clothing/eye protection/face protection  
Take action to prevent static discharges  
Use non-sparking tools

**Response**

IF exposed or concerned: Get medical attention/advice

**Inhalation**

IF INHALED: Remove person to fresh air and keep comfortable for breathing

**Skin**

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

Take off contaminated clothing and wash before reuse

**Eyes**

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

**Ingestion**

IF SWALLOWED: Immediately call a POISON CENTER or doctor

Do NOT induce vomiting

**Fire**

In case of fire: Use CO2, dry chemical, or foam to extinguish

**Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Toxic to aquatic life with long lasting effects

**Hazards classified under paragraph (d)(1)(ii) of 1910.1200**

No information available

WARNING. Reproductive Harm - <https://www.p65warnings.ca.gov/>.**3. Composition/information on Ingredients**

Component	CAS No	Weight %
Hexane, branched and linear	92112-69-1	100

**4. First-aid measures**

<b>General Advice</b>	If symptoms persist, call a physician.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. Risk of serious damage to the lungs (by aspiration).
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Call a physician or poison control center immediately. If vomiting occurs naturally, have victim lean forward.
<b>Most important symptoms and effects</b>	Difficulty in breathing. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Causes central nervous system depression
<b>Notes to Physician</b>	Treat symptomatically

**5. Fire-fighting measures**

<b>Suitable Extinguishing Media</b>	Water spray, carbon dioxide (CO <sub>2</sub> ), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.
<b>Unsuitable Extinguishing Media</b>	Do not use a solid water stream as it may scatter and spread fire
<b>Flash Point</b>	-22 °C / -7.6 °F
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	223 °C / 433.4 °F
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

**Specific Hazards Arising from the Chemical**

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

**Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

**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.

**NFPA**

<b>Health</b> 3	<b>Flammability</b> 3	<b>Instability</b> 1	<b>Physical hazards</b> N/A
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**6. Accidental release measures**

**Personal Precautions** Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

**Environmental Precautions** Do not flush into surface water or sanitary sewer system.

**Methods for Containment and Clean Up** Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment.

**7. Handling and Storage**

**Handling** Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

**Storage.** Keep containers tightly closed in a dry, cool and well-ventilated place. Flammables area. Keep away from heat, sparks and flame. Incompatible Materials. Strong oxidizing agents.

**8. Exposure controls / personal protection****Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH	Mexico OEL (TWA)
Hexane, branched and linear		(Vacated) TWA: 500 ppm (Vacated) TWA: 1800 mg/m <sup>3</sup> (Vacated) STEL: 1000 ppm (Vacated) STEL: 3600 mg/m <sup>3</sup>		

NIOSH: NIOSH - National Institute for Occupational Safety and Health

**Engineering Measures** Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting equipment. Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment**

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Recommended Filter type:** Organic gases and vapours filter. Type A. Brown. conforming to EN14387.

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

## 9. Physical and chemical properties

<b>Appearance</b>			
<b>Physical State</b>	Liquid		
<b>Color</b>	Colorless		
<b>Odor</b>	No information available		
<b>Odor Threshold</b>	No information available		
<b>Property</b>	<b>Values</b>	<b>Remarks</b>	<b>• Method</b>
<b>Melting Point/Range</b>	-95 °C / -139 °F		
<b>Softening Point</b>	No data available		
<b>Boiling Point/Range</b>	69 °C / 156.2 °F	@ 760 mmHg	
<b>Flash Point</b>	-22 °C / -7.6 °F		
<b>Flammability (liquid)</b>	Highly flammable		
<b>Flammability (solid,gas)</b>	Not applicable		
<b>Explosion Limits</b>	<b>Lower</b> 1.1 vol%		
	<b>Upper</b> 7.5 vol%		
<b>Autoignition Temperature</b>	223 °C / 433.4 °F		
<b>Decomposition Temperature</b>	No data available		
<b>pH</b>	No information available		
<b>Viscosity</b>	0.31 mPa s @ 20 °C		
<b>Water Solubility</b>	Immiscible		
<b>Solubility in other solvents</b>	No information available		
<b>Partition Coefficient (n-octanol/water)</b>			
<b>Component</b>	<b>log Pow</b>		
Hexane, branched and linear	4.11		
<b>Vapor Pressure</b>	160 mbar @ 20°C		
<b>Density / Specific Gravity</b>	0.659		
<b>Bulk Density</b>	Not applicable	Liquid	
<b>Vapor Density</b>	No data available	(Air = 1.0)	
<b>Particle characteristics</b>	Not applicable (liquid)		
<b>Other Information</b>			
<b>Molecular Formula</b>	C6 H14		
<b>Molecular Weight</b>	86.18		
<b>Explosive Properties</b>	Vapors may form explosive mixtures with air		

## 10. Stability and reactivity

<b>Reactive Hazard</b>	None known, based on information available
<b>Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	Incompatible products. Excess heat. Exposure to light. Keep away from open flames, hot surfaces and sources of ignition.
<b>Incompatible Materials</b>	Strong oxidizing agents
<b>Hazardous Decomposition Products</b>	Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> )
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	None under normal processing.

## 11. Toxicological information

### Information on expected route of exposure

<b>Inhalation</b>	May cause irritation of respiratory tract. May be harmful if inhaled. May cause drowsiness and dizziness.
<b>Ingestion</b>	Harmful: may cause lung damage if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. Potential for aspiration if swallowed.
<b>Eyes</b>	Irritating to eyes.
<b>Skin</b>	Irritating to skin. May be harmful in contact with skin.

**Toxicology data for the components**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hexane, branched and linear	LD50 = 15000 mg/kg ( Rat )	LD50 = 3350 mg/kg (Rabbit)	LC50 = 259354 mg/m <sup>3</sup> (Rat) 4h

**Toxicologically Synergistic Products** No information available

**(b) skin corrosion/irritation;** Category 2

**(c) serious eye damage/irritation;** Based on available data, the classification criteria are not met

**(d) respiratory or skin sensitization;**  
**Respiratory** Based on available data, the classification criteria are not met  
**Skin** Based on available data, the classification criteria are not met

**(e) germ cell mutagenicity;** Based on available data, the classification criteria are not met

**(f) carcinogenicity;** Based on available data, the classification criteria are not met  
 The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Hexane, branched and linear	92112-69-1	Not listed	Not listed	Not listed	Not listed	Not listed

**(g) reproductive toxicity;** Category 2

**Reproductive Effects** Possible risk of impaired fertility.

**(h) STOT-single exposure;** Category 3

**Results / Target organs** Central nervous system (CNS).

**(i) STOT-repeated exposure;** Category 2

**Target Organs** Heart, Central nervous system (CNS).

**(j) aspiration hazard;** Category 1

**Symptoms / effects, both acute and delayed** Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Causes central nervous system depression.

**Other Adverse Effects** The toxicological properties have not been fully investigated.

**Endocrine Disrupting Properties** This product does not contain any known or suspected endocrine disruptors.

## 12. Ecological information

### Ecotoxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Based on available literature. Data from closely analogous substances.

**Persistence and Degradability** Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its volatility.

Component	log Pow
Hexane, branched and linear	4.11

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

### DOT

UN-No UN1208  
 Proper Shipping Name Hexanes  
 Hazard Class 3  
 Packing Group II

### TDG

UN-No UN1208  
 Proper Shipping Name HEXANES  
 Hazard Class 3  
 Packing Group II

### IATA

UN-No UN1208  
 Proper Shipping Name Hexanes (Mixture)  
 Hazard Class 3  
 Packing Group II

### IMDG/IMO

UN-No UN1208  
 Proper Shipping Name Hexanes (Mixture)  
 Hazard Class 3  
 Packing Group II

## 15. Regulatory Information

### United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Hexane, branched and linear	92112-69-1	-	-	-

#### **Legend:**

**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

**TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)** Not applicable

**TSCA 12(b)** - Notices of Export Not applicable

**International Inventories**

Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Hexane, branched and linear	92112-69-1	-	-	295-570-2	-	X	X	X	-	-

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

**U.S. Federal Regulations****SARA 313****SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)** Not applicable

**Clean Air Act**

**OSHA - Occupational Safety and Health Administration** Not applicable

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Hexane, branched and linear	92112-69-1	Male reproductive (n-hexane)	-	Developmental

**U.S. State Right-to-Know Regulations****U.S. Department of Transportation**

Reportable Quantity (RQ): Y  
 DOT Marine Pollutant N  
 DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** Serious risk, Grade 3

**Authorisation/Restrictions according to EU REACH** Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances	REACH (1907/2006) - Annex XVII - Restrictions	REACH Regulation (EC 1907/2006) article 59 -

		Subject to Authorization	on Certain Dangerous Substances	Candidate List of Substances of Very High Concern (SVHC)
Hexane, branched and linear	92112-69-1	-	Use restricted. See entry 75. (see link for restriction details)	-

#### Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Hexane, branched and linear	92112-69-1	Listed	Not applicable	Not applicable	Not applicable

#### Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

#### Other International Regulations

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Hexane, branched and linear	92112-69-1	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other Information

<b>Prepared By</b>	Product stewardship (Regulatory Affairs) Thermo Fisher Scientific email - begel.sdsdesk@thermofisher.com
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<b>Print Date</b>	18-Dec-2025
<b>Revision Summary</b>	Updated to the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200, 2024), May 20, 2024, effective July 19, 2024.

#### Disclaimer

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

**End of SDS**