

1. Chemical product and company identification

Product name	ISOHEXADECANE For R&D Use Only.
MSDS #	0000000115
Code	0000000115 (NAP)
Product use	Personal Care Products
Supplier	INEOS USA LLC 2600 South Shore Blvd. League City, Texas 77573
EMERGENCY SPILL INFORMATION:	1 (800) 424-9300 Outside the US: +1 703-527-3887 (CHEMTREC)
OTHER PRODUCT INFORMATION	1-866-363-2454 email: OLIGOMERSMSDS@innovene.com

2. Composition/information on ingredients

Ingredient name	CAS #	% by weight
Hydrocarbons, C4, 1,3-butadiene-free, polymd., tetraisobutylene fraction	93685-80-4	100

3. Hazards identification

Physical state	Liquid.
Color	Colorless. Clear.
Emergency overview	WARNING! TOXIC IF INHALED. ASPIRATION HAZARD. Harmful or fatal if liquid is aspirated into lungs. Do not ingest. If ingested do not induce vomiting. Wash thoroughly after handling.
Routes of entry	Dermal contact. Eye contact. Inhalation. Ingestion.
Potential health effects	
Eyes	No significant health hazards identified.
Skin	No significant health hazards identified.
Inhalation	Toxic if inhaled.
Ingestion	Aspiration hazard if swallowed -- harmful or fatal if liquid is aspirated into lungs.

See toxicological information (section 11)

4. First aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin contact	Wash with soap and water. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	If swallowed, do NOT induce vomiting. Never give anything by mouth to an unconscious person. Aspiration hazard if swallowed- can enter lungs and cause damage. Get medical attention immediately.

5. Fire-fighting measures

Flammability of the product	May be combustible at high temperature.
Auto-ignition temperature	400 °C
Flash point	102 °C (215.6°F) (Closed cup) Pensky-Martens.
Explosion limits	Lower: 0.6 % Upper: 4.7 %
Products of combustion	These products are carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide), other hazardous substances.
Unusual fire/explosion hazards	This material is not explosive as defined by established regulatory criteria.
Fire-fighting media and instructions	In case of fire, use water fog, foam, dry chemicals, or carbon dioxide.
Protective clothing (fire)	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

6. Accidental release measures

Personal precautions	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (See Section: "Exposure controls/personal protection"). Follow all fire fighting procedures (See Section: "Fire-fighting measures").
Environmental precautions and clean-up methods	If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways. See Section 13 for Waste Disposal Information.
Personal protection in case of a large spill	Splash goggles. Full suit. Boots. Gloves. If concentration is unknown, a Self-Contained Breathing Apparatus (SCBA) should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

7. Handling and storage

Handling	Aspiration hazard if swallowed- can enter lungs and cause damage. Do not ingest. If ingested do not induce vomiting. Wash thoroughly after handling.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name	Occupational exposure limits
------------------------	-------------------------------------

Hydrocarbons, C4, 1,3-butadiene-free, polyimd., tetraisobutylene fraction	None assigned.
---	----------------

Control Measures	Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.
-------------------------	---

Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
-------------------------	--

Personal protection

Eyes	Chemical splash goggles.
-------------	--------------------------

Skin and body	None required; however, use of protective clothing is good industrial practice.
----------------------	---

Respiratory	Use with adequate ventilation. Do not breathe vapor or mist. If ventilation is inadequate, use respirator that will protect against organic vapor and dust/mist.
--------------------	--

The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Consult your supervisor or S.O.P. for special handling directions

Consult local authorities for acceptable exposure limits.

9. Physical and chemical properties

Physical state	Liquid.
Odor	Odorless.
Color	Colorless. Clear.
Boiling point / Range	210 to 250 °C
Melting point / Range	-70 °C (-94°F)
Density	0.79 g/cm ³ at 20 °C (68°F)
Vapor pressure	0.01 kPa
Solubility	< 0.1 g/l at 20°C
LogK_{ow}	The product is more soluble in octanol; log(octanol/water) >7
Viscosity	Kinematic: <7 mm ² /s (<7 cSt) at 40°C Kinematic: 5.2 mm ² /s (5.2 cSt) at 20°C

10. Stability and reactivity

Stability and reactivity	The product is stable.
Conditions to avoid	Keep away from heat, sparks and flame.
Incompatibility with various substances	Highly reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Products of combustion : carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide)
Hazardous polymerization	Will not occur.

11. Toxicological information

Ingredient name	Test	Result	Route	Species
ISOHEXADECANE	LD50	>36600 mg/kg	Oral	Rat
	LC50	1.73 mg/l (4 hour (s))	Inhalation	Rat

Chronic toxicity

Carcinogenic effects

No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).

Mutagenic effects

No component of this product at levels greater than or equal to 0.1% is classified by established regulatory criteria as a mutagen.

Reproductive effects

No component of this product at levels greater than or equal to 0.1% is classified by established regulatory criteria as a reproductive toxin.

Teratogenic effects

No component of this product at levels greater than or equal to 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.

Other information

Aspiration of this material into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this material.

12. Ecological information

Ecotoxicity	No testing has been performed by the manufacturer.
Persistence/degradability	This product is inherently biodegradable.
Mobility	This product is not likely to move rapidly with surface or groundwater flows because of its low water solubility. This product is not likely to volatilize rapidly into the air because of its low vapor pressure.
Bioaccumulative potential	This product shows a low bioaccumulation potential.

13. Disposal considerations

Waste information	Avoid contact of spilled material and runoff with soil and surface waterways. Consult an environmental professional to determine if state or federal regulations would classify spilled or contaminated materials as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities. Dispose of in accordance with all applicable local and national regulations.
--------------------------	--

[Consult your local or regional authorities.](#)

14. Transport information

Not classified as hazardous for transport (DOT, TDG, IMO/IMDG, IATA/ICAO)

15. Regulatory information

U.S. Federal regulations	US INVENTORY (TSCA): Not listed. This product is not regulated under Section 302 of SARA and 40 CFR Part 355. SARA 311/312 MSDS distribution - chemical inventory - hazard identification: ISOHEXADECANE : Immediate (Acute) Health Hazard
SARA 313	
Form R - Reporting requirements	This product does not contain any hazardous ingredients at or above regulated thresholds.
Supplier notification	This product does not contain any hazardous ingredients at or above regulated thresholds. CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4):: This material is not regulated under CERCLA Sections 103 and 107.
State regulations	No products were found. California Prop 65: No products were found
Inventories	AUSTRALIAN INVENTORY (AICS): Not listed. CANADA INVENTORY (DSL): Listed on inventory. CHINA INVENTORY (IECS): Listed on inventory. EC INVENTORY (EINECS): Listed on inventory. JAPAN INVENTORY (ENCS): Listed on inventory. KOREA INVENTORY (ECL): Listed on inventory. PHILIPPINE INVENTORY (PICCS): Listed on inventory.

16. Other information

Label requirements	WARNING! TOXIC IF INHALED. ASPIRATION HAZARD. Harmful or fatal if liquid is aspirated into lungs.
---------------------------	--

Product name	ISOHEXADECANE	MSDS #	0000000115 (NAP)	Page: 4/5
Version 1	Date of issue 02/21/2007.	Format US-COMP	Language ENGLISH.	(ENGLISH)
Build 4.2.7				

HMIS® Rating :

Health 2
 Flammability 0
 Physical Hazard 0
 Personal protection X

**National Fire
 Protection
 Association
 (U.S.A.)**



Date of issue 02/21/2007.
Date of previous issue 12/18/2006.
Prepared by Product Stewardship

Notice to reader

The information in this Material Safety Data Sheet is based upon data considered to be accurate at the time of its preparation. This information in no way modifies, amends, enlarges, or creates any specification or warranty, and ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXCLUDED. This information is a recommendation for safe handling, use, processing, storage, transportation, disposal, and release and Supplier shall not be responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices, or from hazards inherent in the nature of the product and/or material. This information relates only to the specific product and/or material designated and may not be valid for such product and/or material used in combination with any other product and/or material or in any process, unless otherwise specified.