

Revision date 14-Feb-2024

Revision Number 5

1. Identification

Product identifier

Product Name Icnene HFO 200

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Component B of polyurethane system

Restrictions on use

Details of the supplier of the safety data sheet

Manufacturer Address

Huntsman Building Solutions
3315 E. Division St.
Arlington, TX 76011
Telephone: 817-640-4900
sds@huntsmanbuilds.com

Emergency telephone number

24 Hour Emergency Phone Number Chemtrec 1-800-424-9300
CANUTEC 613-996-6666 or *666 (cellular)

Emergency Telephone

2. Hazard(s) identification

Classification

Acute toxicity - Oral

Category 4

Appearance Liquid

Physical state Liquid

Odor

Label elements

Warning

Hazard statements

Harmful if swallowed



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Precautionary Statements - Response**Ingestion**

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

Rinse mouth

Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant

Other information

No information available.

Unknown acute toxicity**3. Composition/information on ingredients****Substance**

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Triethyl phosphate	78-40-0	0.75 - 4.3	-	-
Glyceryl polypropylene glycol triether	25791-96-2	0.25 - 3.5	-	-
Ethylene glycol	107-21-1	0.05 - 3.25	-	-

4. First-aid measures**Description of first aid measures**

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.

Most important symptoms and effects, both acute and delayed

Symptoms	No information available.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. Fire-fighting measures

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical No information available.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	
Ethylene glycol 107-21-1	STEL: 50 ppm vapor fraction STEL: 10 mg/m ³ inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction	-	-	
Chemical name	Alberta	British Columbia	Ontario	Quebec
Ethylene glycol 107-21-1	Ceiling: 100 mg/m ³	TWA: 10 mg/m ³ STEL: 20 mg/m ³	TWA: 25 ppm STEL: 50 ppm	Ceiling: 50 ppm Ceiling: 127 mg/m ³

		Ceiling: 100 mg/m ³ Ceiling: 50 ppm	STEL: 10 mg/m ³	
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Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid
Appearance Liquid
Color blue
Odor
Odor threshold

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash point	> 93.3 °C / 199.9 °F	Pensky-Martens Closed Cup (PMCC)
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Relative vapor density	No data available	None known
Relative density	1.17 - 1.21	None known
Water solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known

Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

Explosive properties	No information available
Oxidizing properties	No information available
VOC Content (%)	No information available

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.
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Acute toxicity

Numerical measures of toxicity
 No information available

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

ATEmix (oral)	1,085.90 mg/kg
ATEmix (dermal)	6,561.50 mg/kg
ATEmix (inhalation-dust/mist)	11.80 mg/l

Unknown acute toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Triethyl phosphate 78-40-0	1100 - 1600 mg/kg (Rat)	> 20 g/kg (Rabbit)	> 8817 mg/m ³ (Rat) 4 h
Glyceryl polypropylene glycol triether 25791-96-2	= 2830 µL/kg (Rat) > 64 mL/kg (Rat)	> 2000 mg/kg (Rat)	-
Ethylene glycol	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat)	> 2.5 mg/L (Rat) 6 h

107-21-1			
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

12. Ecological information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethylene glycol 107-21-1	EC50: 6500 - 13000mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =41000mg/L (96h, Oncorhynchus mykiss) LC50: 14 - 18mL/L (96h, Oncorhynchus mykiss) LC50: =27540mg/L (96h, Lepomis macrochirus) LC50: =40761mg/L (96h, Oncorhynchus mykiss) LC50: 40000 - 60000mg/L (96h, Pimephales promelas) LC50: =16000mg/L (96h, Poecilia reticulata)	-	EC50: =46300mg/L (48h, Daphnia magna)

Persistence and degradability

Bioaccumulation No information available.

Component Information

Chemical name	Partition coefficient
Triethyl phosphate 78-40-0	1.11
Ethylene glycol 107-21-1	-1.36

Mobility in soil

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.

Contaminated packaging Do not reuse empty containers.

14. Transport information

DOT Not regulated

15. Regulatory information

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

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Contact supplier for inventory compliance status Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status Contact supplier for inventory compliance status
KECL	Contact supplier for inventory compliance status Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status Contact supplier for inventory compliance status
AICS	Contact supplier for inventory compliance status Contact supplier for inventory compliance status

Legend:

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

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

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

ENCS - Japan Existing and New Chemical Substances

IECSC - 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

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Ethylene glycol - 107-21-1	1.0

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)

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, contains one or more 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	Reportable Quantity (RQ)
Ethylene glycol 107-21-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Ethylene glycol - 107-21-1	Developmental

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethylene glycol 107-21-1	X	X	X
Water 7732-18-5	-	-	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	Health hazards 1	Flammability 2	Instability 0	Special hazards -
HMIS	Health hazards 1	Flammability 2	Physical hazards 0	Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

- Agency for Toxic Substances and Disease Registry (ATSDR)
- U.S. Environmental Protection Agency ChemView Database
- European Food Safety Authority (EFSA)
- EPA (Environmental Protection Agency)
- Acute Exposure Guideline Level(s) (AEGl(s))
- U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 14-Feb-2024

Revision Note

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 Safety Data Sheet