Quality Extractions Group, LLC
SAFETY DATA SHEET

1. Identification

Product identifier

Product Name HEPTANE

Other means of identification

Product Code(s) HP662

UN/ID no UN1206

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Address

Quality Extractions Group, LLC
2533 Tracy Rd.
Northwood, OH 43619
(567) 698-9802

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Specific target organ toxicity (single exposure)	Category 3
Aspiration hazard	Category 1
Flammable liquids	Category 2

Hazards not otherwise classified (HNOC)
Not applicable

Label elements

Danger

Hazard statements

Causes skin irritation
Causes eye irritation
May be fatal if swallowed and enters airways
May cause respiratory irritation. May cause drowsiness or dizziness
Highly flammable liquid and vapor

Appearance clear **Physical state** Liquid **Odor** Characteristic

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ ventilating / lighting/ .? / equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Wear protective gloves/eye protection/face protection

Precautionary Statements - Response
Specific treatment (see .? on this label)
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
If skin irritation occurs: Get medical advice/attention
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Call a POISON CENTER or doctor if you feel unwell
IF SWALLOWED: Immediately call a POISON CENTER or doctor
Do NOT induce vomiting

Precautionary Statements - Storage
Store locked up.
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other information
May be harmful in contact with skin.

3. Composition/information on ingredients

Substance

Chemical name	CAS No	Weight-%
n-Heptane	142-82-5	100

4. First-aid measures

Description of first aid measures

General advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Inhalation Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed pulmonary edema may occur.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.

Ingestion ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms Difficulty in breathing. Coughing and/ or wheezing. Dizziness.

Indication of any immediate medical attention and special treatment needed

Note to physicians Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.

5. Fire-fighting measures

Suitable Extinguishing Media
Large Fire Dry chemical. Carbon dioxide (CO_2). water spray. Alcohol resistant foam.
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 risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO_2).

Explosion data
Sensitivity to mechanical impact none.

Sensitivity to static discharge yes.

Special protective equipment 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 Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the

product must be grounded. Do not touch or walk through spilled material.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up. Keep out of the reach of children. Store away from other materials.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
n-Heptane 142-82-5	No data available	500 ppm TWA 2000 mg/m³ TWA	-

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.
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	Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	clear
Color	Colorless
Odor	Characteristic
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH	no data available	None known
Melting point / freezing point	-90.7 °C / -131.3 °F	None known
Boiling point / boiling range	98.4 °C / 209.1 °F	None known
Flash point	-4 °C / 24.8 °F	None known
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	6.7%	
Lower flammability or explosive limits	1.05%	
Vapor pressure	5.3 @ 22.3 °C (kPa)	None known
Vapor density	4.66	None known
Relative density	0.6838	None known
Water solubility	Insoluble in water	None known
Solubility(ies)	Soluble in Carbon tetrachloride Soluble in Ethanol	None known
Partition coefficient	4.66	None known
Autoignition temperature	204 - 285 °C / 399.2 - 545 °F	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
Softening point	No information available
Molecular weight	100.20
VOC Content (%)	No information available
Liquid Density	No information available
Bulk density	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	Heat, flames and sparks.

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

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. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract.

Eye contact Specific test data for the substance or mixture is not available. Irritating to eyes. (based on components). Causes eye irritation.

Skin contact Repeated exposure may cause skin dryness or cracking. Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).

Ingestion Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Redness. May cause redness and tearing of the eyes.

Acute toxicity

Numerical measures of toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
n-Heptane 142-82-5	= 17000 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	= 103 g/m³ (Rat) 4 h

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

Skin corrosion/irritation Classification based on data available for ingredients. Irritating to skin.

Serious eye damage/eye irritation Classification based on data available for ingredients. Irritating to eyes.

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.

Target organ effects respiratory system, Skin, central nervous system.

Aspiration hazard May be fatal if swallowed and enters airways.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
n-Heptane 142-82-5	-	LC50: =375.0mg/L (96h, Cichlid fish)	-	EC50: >10mg/L (24h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation Inherently biodegradable.

Component Information

Chemical name	Partition coefficient
n-Heptane 142-82-5	4.66

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld containers.

14. Transport information

DOT

UN/ID no UN1206
Proper shipping name Heptanes
Hazard class 3
Special Provisions II
Special Provisions IB2, T4, TP2
Marine Pollutant Severe Marine Pollutant
Description UN1206, Heptanes, 3, II
Emergency Response Guide Number 128

TDG

UN/ID no. UN1206
Proper shipping name Heptanes
Hazard class 3
Packing Group II
Description UN1206, Heptanes, 3, II

MEX

UN-No UN1206
Proper Shipping Name Heptanes
Hazard class 3
Packing Group II

Description	UN1206, Heptanes, 3, II

ICAO (air)

UN/ID no.	UN1206
Proper shipping name	Heptanes
Hazard class	3
Packing Group	II
Description	UN1206, Heptanes, 3, II

IATA

UN number	UN1206
Proper shipping name	Heptanes
Hazard Class	3
Packing group	II
Description	UN1206, Heptanes, 3, II

IMDG

UN number	UN1206
Proper shipping name	Heptanes
Hazard Class	3
Packing group	II
EmS-No	F-E, S-D
Marine Pollutant	P
Description	UN1206, Heptanes, 3, II, (-4°C c.c.), Marine Pollutant Technical Name

RID

UN number	UN1206
Proper shipping name	Heptanes
Hazard Class	3
Packing group	II
Classification code	F1
Description	UN1206, Heptanes, 3, II, ENVIRONMENTALLY HAZARDOUS
Labels	3

ADR

UN number	1206
Proper shipping name	Heptanes
Hazard Class	3
Packing group	II
Classification code	F1
Tunnel restriction code	(D/E)
Description	1206, Heptanes, 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS
Labels	3

ADN

UN/ID No	UN1206
Proper shipping name	Heptanes
Hazard Class	3
Packing Group	II
Classification code	F1
Description	UN1206, Heptanes, 3, II, ENVIRONMENTALLY HAZARDOUS
Hazard label(s)	3
Limited quantity (LQ)	1 L
ventilation	VE01
Equipment Requirements	PP, EX, A

15. Regulatory information

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies

ENCS	This product complies with ENCS:
IECSC	This product complies with China:
KECL	Complies
PICCS	Complies
AICS	All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

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

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

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, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations
This product does not contain any substances regulated under applicable state right-to-know regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
n-Heptane 142-82-5	1339	Present	Present

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA
Health hazards 2
Flammability 3

Instability 0
Physical and chemical properties -
HMIS
Health hazards 2
Flammability 3
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		

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

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