according to 29 CFR 1910.1200(g)

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1. Identification

Product identifier

MinOil, P20.190.40

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Heat transfer oil / cold transfer oil

Uses advised against

Any non-intended use.

Details of the supplier of the safety data sheet

Company name: Huber USA Inc.

Street: 1101 Nowell Rd Suite 110
Place: USA-NC 27607 Raleigh

Telephone: 800-726-4877

E-mail: info@huber-online.com Internet: www.huber-usa.com

Emergency phone number: Toll Free: 1-800-424-9300; Local: +1-703-527-3887

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

Aspiration hazard: Asp. Tox. 1

Label elements

29 CFR Part 1910.1200

Signal word: Danger

Pictograms:



Hazard statements

May be fatal if swallowed and enters airways

Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

If swallowed: Immediately call a poison center/doctor.

Do NOT induce vomiting.

Store locked up.

Dispose of contents/container to local/regional/national/international regulations.

Hazards not otherwise classified

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

Hazardous components

CAS No	Components	Quantity	ĺ
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64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil - unspecified	>=50-<=75 %	

64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil - unspecified	>=50-<=75 %
64742-65-0	Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil - unspecified	>=25-<=50 %

4. First-aid measures

Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest.

If breathing is irregular or stopped, administer artificial respiration.

If unconscious place in recovery position and seek medical advice.

No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.

In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

Change contaminated clothing.

In case of skin irritation, seek medical treatment.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart.

Remove contact lenses, if present and easy to do. Continue rinsing.

In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water.

Let water be drunken in little sips (dilution effect).

Do NOT induce vomiting.

In all cases of doubt, or when symptoms persist, seek medical advice.

Never give anything by mouth to an unconscious person or a person with cramps.

Most important symptoms and effects, both acute and delayed

See sections 2 and 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2). Dry extinguishing powder. Alcohol resistant foam. Atomized water.

Unsuitable extinguishing media

High power water jet.

Specific hazards arising from the chemical

Can be released in case of fire: Carbon monoxide (CO). Carbon dioxide (CO2).

Special protective equipment and precautions for fire-fighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Co-ordinate fire-fighting measures to the fire surroundings.

6. Accidental release measures

according to 29 CFR 1910.1200(g)

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Personal precautions, protective equipment and emergency procedures

General advice

See protective measures under point 7 and 8.

For non-emergency personnel

Wear personal protection equipment (refer to section 8).

For emergency responders

No special measures are necessary.

Environmental precautions

Discharge into the environment must be avoided.

Methods and material for containment and cleaning up

For containment

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Always close containers tightly after the removal of product. When using do not eat, drink or smoke. Wash hands before breaks and after work.

Further information on handling

General protection and hygiene measures: See section 8.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.

Recommended storage temperature: 20 °C

Protect against: frost. UV-radiation/sunlight. heat. Humidity

8. Exposure controls/personal protection

Control parameters

according to 29 CFR 1910.1200(g)

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Exposure limits

CAS No	Substance	ppm	mg/m³	f/cc	Category	Origin
8012-95-1	Oil mist (mineral)	-	5		TWA (8 h)	REL
		-	10		STEL (15 min)	REL
8012-95-1	Oil mist, mineral	-	5		TWA (8 h)	PEL

Additional advice on limit values

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Exposure controls





Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible). Standards: EN 166 or 29 CFR 1910.133

Hand protection

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of the glove material 0,4 mm

Breakthrough time >= 8 h

Butyl rubber. - Thickness of the glove material 0,5 mm

Breakthrough time >= 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of the glove material 0,5 mm

Breakthrough time >= 8 h

NBR (Nitrile rubber). - Thickness of the glove material 0,35 mm

Breakthrough time >= 8 h

PVC (Polyvinyl chloride). - Thickness of the glove material 0,5 mm

Breakthrough time >= 8 h

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

The selected protective gloves should satisfy the specifications of standards like EN 374.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Lab apron.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

Exceeding exposure limit values

Suitable respiratory protective equipment: half-mask with filter EN 149 or 29 CFR 1910.134.

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

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Environmental exposure controls

No special precautionary measures are necessary.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: liquid
Color: light yellow
Odor: Hydrocarbons

Test method

Melting point/freezing point:

Boiling point or initial boiling point and

>250 °C

boiling range:

Lower explosion limits: not determined Upper explosion limits: not determined

Flash point: >180 °C ASTM D 92

Auto-ignition temperature: not determined Decomposition temperature: >250 °C pH-Value: 7 Viscosity / kinematic: 19 mm²/s

(at 40 °C)

Water solubility: Immiscible

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: >3
Vapor pressure: <0,01 hPa

(at 20 °C)

Density (at 15 °C): 0,87 g/cm³
Relative vapour density: not determined

Other information

Information with regard to physical hazard classes

Explosive properties

none

Sustaining combustion: Not sustaining combustion

Self-ignition temperature

Gas: not determined

Oxidizing properties

none

Other safety characteristics

Evaporation rate: not determined Solvent separation test: not determined Solvent content: not determined Solid content: not determined Sublimation point: not determined Softening point: not determined Pour point: not determined Viscosity / dynamic: not determined Flow time: not determined

10. Stability and reactivity

Reactivity

No information available.

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Chemical stability

Stability: Stable

The product is chemically stable under recommended conditions of storage, use and temperature.

Possibility of hazardous reactions

Hazardous reactions: Will not occur

No information available.

Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

Incompatible materials

Materials to avoid: Oxidizing agents, strong.

Hazardous decomposition products

Does not decompose when used for intended uses.

11. Toxicological information

Route(s) of Entry

Ingestion: May be harmful if swallowed. Inhalation: May be harmful if inhaled. Skin contact: May cause irritation. Eye contact: May cause irritation.

Information on toxicological effects

Toxicocinetics, metabolism and distribution

No data available.

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Components					
	Exposure route	Dose	Species	Source	Method	
64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil - unspecified					
	oral	LD50 >5000 mg/kg	Rat	ECHA Dossier	OECD 401	
	dermal	LD50 >2000 mg/kg	Rabbit	ECHA Dossier	OECD 402	
64742-65-0	Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil - unspecified					
	oral	LD50 >5000 mg/kg	Rat	REACH Dossier	OECD 401	
	dermal	LD50 >2000 mg/kg	Rabbit	REACH Dossier	OECD 402	

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitizing effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil - unspecified:

In vitro mutagenicity/genotoxicity Method: OECD Guideline 473 (In Vitro Mammalian Chromosomal Aberration Test); Result: negative. Literature information: REACH Dossier; Carcinogenicity: Method: OECD Guideline 453 (Combined Chronic Toxicity/Carcinogenicity Studies); Species: Mouse.; Results: Non-carcinogenic if DMSO

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extract as measured by IP346 is less than 3% m/m. Literature information: REACH Dossier; Reproductive toxicity: Species: Rat (Sprague-Dawley); Method: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test); Results: NOAEL > 1000 mg/kg Literature information: REACH Dossier; Developmental toxicity/teratogenicity: Species: Rat (Sprague-Dawley); Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study); Results: NOAEL >= 2000 mg/kg Literature information: REACH Dossier

Specific target organ toxicity (STOT) - single exposure

Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - repeated exposure

Based on available data, the classification criteria are not met.

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil - unspecified:

Subacute inhalative toxicity: Method: -; Exposure time: 28d; Species: Rat; Results: NOAEL >980 mg/m3; Literature information: REACH Dossier; Subacute dermal toxicity: Method: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-day Study); Exposure time: 28d; Species: Rabbit; Results: 1000 mg/kg; Literature

information: REACH Dossier

Carcinogenicity (OSHA): No ingredient of this mixture is listed.

Carcinogenicity (IARC): Mineral oils, highly-refined is listed in group 3. Mineral oils, highly-refined is listed

in group 3.

Carcinogenicity (NTP): No ingredient of this mixture is listed.

Aspiration hazard

May be fatal if swallowed and enters airways

Specific effects in experiment on an animal

No data available.

Information on other hazards

Endocrine disrupting properties

No data available.

12. Ecological information

Ecotoxicity

No data available.

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

13. Disposal considerations

Waste treatment methods

Disposal recommendations

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled.

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RCRA Hazardous wastes (Resource Conservation and Recovery Act)

None

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

14. Transport information

U.S. DOT 49 CFR 172.101

Proper shipping name: Not a hazardous material with respect to these transport regulations. &&

Not controlled under DOT

Marine transport (IMDG)

UN number or ID number:No dangerous good in sense of this transport regulation.UN proper shipping name:No dangerous good in sense of this transport regulation.Transport hazard class(es):No dangerous good in sense of this transport regulation.Packing group:No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number:No dangerous good in sense of this transport regulation.UN proper shipping name:No dangerous good in sense of this transport regulation.Transport hazard class(es):No dangerous good in sense of this transport regulation.Packing group:No dangerous good in sense of this transport regulation.

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

Special precautions for user

See section 8.

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

not relevant

15. Regulatory information

U.S. Regulations

National Inventory TSCA

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil - unspecified listed in the TSCA inventory 8 (b): (x) active, Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil - unspecified, Distillates (petroleum),

hydrotreated heavy paraffinic; Baseoil - unspecified not listed under TSCA 12(b)

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

This preparation is hazardous in the sense of regulation 29 CFR Part 1910.1200.

16. Other information

Hazardous Materials Identification System (HMIS)

Health: 2
Flammability: 1
Physical Hazard: 0
Personal Protection: U

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NFPA Hazard Ratings

Health: 2
Flammability: 1
Reactivity: 0
Unique Hazard: -

Changes

Revision date: 07/20/2023

Revision No: 2,0

Rev. 1,0 Initial release 17.08.2020 Rev. 2,0 Revision 20.07.2023

Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists

ASTM: American Society for Testing and Materials.

ATE: acute toxicity estimate BCF: Bio concentration factor ECHA: European Chemicals Agency CAS: Chemical Abstracts Service CFR: Code of Federal Regulations DOT: Department of Transportation

d: days

EC50: Half maximal effective concentration

EN: European Norm

EPA: Environmental Protection Agency

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

h: hours

HMIS: Hazardous Materials Identification System

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IBC: Intermediate Bulk Container

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent MARPOL: marine pollution

NOAEL: No observed adverse effect level

NOAEC: No observed adverse effect concentration

NTP: National Toxicology Program

N/A: not applicable

NFPA: National Fire Protection Association

UN: United Nations

OECD: Organisation for Economic Co-operation and Development

OSHA: Occupational Safety and Health Administration

PBT: Persistent bioaccumulative toxic

RTECS: Registry of Toxic Effects of Chemical Substances

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

SARA: Superfund Amendments and Reauthorization Act

STEL: short-term exposure limits TSCA: Toxic Substances Control Act

TWA: time weighted average



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VOC: Volatile Organic Compounds

Other data

Classification according 29 CFR Part 1910.1200: - Classification procedure:

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)