## HYPAR FG-22

| Version | Revision Date: | Date of last issue: 15.11.2021 | Print Date: |
|---|---|---|---|
| 2.0 | 01.09.2026 | Date of first issue: 15.11.2021 | 01.09.2026 |

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : HYPAR FG-22

Article-No. : 340250

**Manufacturer or supplier's details**

Company name of supplier : Klüber Lubrication NA LP
9010 County Road 2120
Tyler, Texas 75707
USA
Phone: +1 903 534 8021
Fax: +1 903 581 4376
info@us.kluber.com

Klüber Lubrication NA LP
32 Industrial Drive
Londonderry, NH 03053
USA
Phone: +1 603 647 4104
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info@us.kluber.com

E-mail address of person responsible for the SDS : klna-productstewardship@klueber.com

Emergency telephone number : +52 442 2295708 (24hrs)

**Recommended use of the chemical and restrictions on use**

Recommended use : Lubricating oil

Restrictions on use : Restricted to professional users.

### SECTION 2. HAZARDS IDENTIFICATION

**Classification of the hazardous chemical or mixture according to the GHS and NOM-018-STPS-2015**

Reproductive toxicity : Category 2



a brand of FREUDENBERG

**Label elements, including precautionary statements and hazard pictograms according to the GHS and NOM-018-STPS-2015**

Hazard pictograms :

Signal word : Warning

Hazard statements : H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

Precautionary statements :

**Prevention:**

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

**Storage:**

P405 Store locked up.

**Other hazards**

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Mineral oil.

**Components**

| Chemical name | CAS-No. | Concentration (% w/w) |
|---|---|---|
| White mineral oil (petroleum) | 8042-47-5 | >= 70 -< 90 |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene | 68411-46-1 | >= 0.25 -< 1 |
| Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1) | 126019-82-7 | >= 0.25 -< 1 |

## SECTION 4. FIRST AID MEASURES

| | | |
|---|---|---|
| If inhaled | : | Obtain medical attention.<br>Remove person to fresh air. If signs/symptoms continue, get medical attention.<br>Keep patient warm and at rest.<br>If unconscious, place in recovery position and seek medical advice.<br>Keep respiratory tract clear.<br>If breathing is irregular or stopped, administer artificial respiration. |
| In case of skin contact | : | Take off all contaminated clothing immediately.<br>Get medical attention immediately if irritation develops and persists.<br>Wash clothing before reuse.<br>Thoroughly clean shoes before reuse.<br>Wash off immediately with plenty of water. |
| In case of eye contact | : | Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.<br>If eye irritation persists, consult a specialist. |
| If swallowed | : | Move the victim to fresh air.<br>If unconscious, place in recovery position and seek medical advice.<br>Keep respiratory tract clear.<br>Do NOT induce vomiting.<br>Obtain medical attention.<br>Rinse mouth with water.<br>Never give anything by mouth to an unconscious person. |
| Most important symptoms and effects, both acute and delayed | : | No symptoms known or expected.<br>Suspected of damaging fertility. Suspected of damaging the unborn child. |
| Notes to physician | : | Treat symptomatically. |

## SECTION 5. FIREFIGHTING MEASURES

| | | |
|---|---|---|
| Suitable extinguishing media | : | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Unsuitable extinguishing media | : | High volume water jet |
| Hazardous combustion products | : | Carbon oxides |

| | | |
|---|---|---|
| Specific extinguishing methods | : | Standard procedure for chemical fires. |
| Special protective equipment for firefighters | : | In the event of fire, wear self-contained breathing apparatus.<br>Use personal protective equipment.<br>Exposure to decomposition products may be a hazard to health. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

| | | |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Evacuate personnel to safe areas.<br>Use personal protective equipment.<br>Ensure adequate ventilation.<br>Do not breathe vapours or spray mist.<br>Refer to protective measures listed in sections 7 and 8. |
| Environmental precautions | : | Try to prevent the material from entering drains or water courses.<br>Prevent further leakage or spillage if safe to do so.<br>Local authorities should be advised if significant spillages cannot be contained. |
| Methods and materials for containment and cleaning up | : | Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). |

## SECTION 7. HANDLING AND STORAGE

| | | |
|---|---|---|
| Advice on safe handling | : | Do not breathe vapours or spray mist.<br>Avoid contact with skin and eyes.<br>For personal protection see section 8.<br>Smoking, eating and drinking should be prohibited in the application area.<br>Wash hands and face before breaks and immediately after handling the product.<br>Do not get in eyes or mouth or on skin.<br>Do not get on skin or clothing.<br>Do not ingest.<br>Do not repack.<br>Do not re-use empty containers.<br>These safety instructions also apply to empty packaging which may still contain product residues.<br>Keep container closed when not in use. |

Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.

Conditions for safe storage : Store in original container.
Keep container closed when not in use.
Keep in a dry, cool and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Store in accordance with the particular national regulations.
Keep in properly labelled containers.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Components with workplace control parameters**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|---|---|---|---|
| White mineral oil (petroleum) | 8042-47-5 | VLE-PPT (Mist) | 5 mg/m3 | NOM-010-STPS-2014 (2014-06-19) |
| | | TWA (Inhalable particulate matter) | 5 mg/m3 | ACGIH (2013-03-01) |
| White mineral oil (petroleum) | 8042-47-5 | VLE-PPT (Mist) | 5 mg/m3 | NOM-010-STPS-2014 (2014-06-19) |
| | | TWA (Inhalable particulate matter) | 5 mg/m3 | ACGIH (2013-03-01) |

**Engineering measures** : Handle only in a place equipped with local exhaust (or other appropriate exhaust).

**Personal protective equipment**

Respiratory protection : Not required; except in case of aerosol formation.

Filter type : Filter type A-P

Hand protection
Material : Nitrile rubber
Break through time : > 10 min

| | | |
|---|---|---|
| Protective index | : | Class 1 |
| Remarks | : | Wear protective gloves. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. |
| Eye protection | : | Safety glasses with side-shields |
| Skin and body protection | : | Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. |
| Protective measures | : | The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| Appearance | : | liquid |
| Colour | : | yellow |
| Odour | : | mild, hydrocarbon-like |
| Odour Threshold | : | No data available |
| pH | : | Not applicable |
| Melting point/ range | : | No data available |
| Boiling point/boiling range | : | No data available |
| Flash point | : | >= 185 °C<br>Method: open cup |
| Flammability (solid, gas) | : | Not applicable |

| | | |
|---|---|---|
| Self-ignition | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapour pressure | : | < 0.001 hPa (20 °C) |
| Relative vapour density | : | No data available |
| Relative density | : | 0.851 (20 °C)<br>Reference substance: Water<br>The value is calculated |
| Density | : | 0.85 g/cm3 (20 °C) |
| Bulk density | : | No data available |
| Solubility(ies) | | |
| Water solubility | : | insoluble |
| Solubility in other solvents | : | No data available |
| Partition coefficient: n-octanol/water | : | No data available |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity | | |
| Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | 22 mm2/s ( 40 °C) |
| Evaporation rate | : | No data available |
| Explosive properties | : | Not explosive |
| Oxidizing properties | : | No data available |
| Sublimation point | : | No data available |

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | No hazards to be specially mentioned. |
| Chemical stability | : | Stable under normal conditions. |
| Possibility of hazardous reactions | : | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | : | No conditions to be specially mentioned. |
| Incompatible materials | : | No materials to be especially mentioned. |
| Hazardous decomposition products | : | No decomposition if stored and applied as directed. |

## SECTION 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

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

**Product:**

| | | |
|---|---|---|
| Acute oral toxicity | : | Remarks: This information is not available. |
| Acute inhalation toxicity | : | Remarks: This information is not available. |
| Acute dermal toxicity | : | Remarks: This information is not available. |

**Components:**

**White mineral oil (petroleum):**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 5,000 mg/kg<br>Method: OECD Test Guideline 401 |
| Acute inhalation toxicity | : | LC50 (Rat): > 5 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Method: OECD Test Guideline 403<br>Assessment: The substance or mixture has no acute inhalation toxicity |
| Acute dermal toxicity | : | LD50 (Rabbit): > 2,000 mg/kg<br>Method: OECD Test Guideline 402<br>Assessment: The substance or mixture has no acute dermal toxicity |

**Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 5,000 mg/kg<br>Method: OECD Test Guideline 401 |

| | | |
|---|---|---|
| Acute dermal toxicity | : | LD50 (Rat): > 2,000 mg/kg<br>Method: OECD Test Guideline 402<br>Assessment: The substance or mixture has no acute dermal toxicity |

**Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1):**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 2,000 mg/kg<br>Method: OECD Test Guideline 401<br>GLP: yes<br>Assessment: The substance or mixture has no acute oral toxicity |
| Acute inhalation toxicity | : | Assessment: The substance or mixture has no acute inhalation toxicity |
| Acute dermal toxicity | : | LD50 (Rat): > 2,000 mg/kg<br>Method: OECD Test Guideline 402<br>GLP: yes<br>Assessment: The substance or mixture has no acute dermal toxicity |

**Skin corrosion/irritation**

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

**Product:**

| | | |
|---|---|---|
| Remarks | : | This information is not available. |

**Components:**

**White mineral oil (petroleum):**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Assessment | : | No skin irritation |
| Method | : | OECD Test Guideline 404 |
| Result | : | No skin irritation |
| GLP | : | yes |

**Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Assessment | : | No skin irritation |
| Method | : | OECD Test Guideline 404 |
| Result | : | No skin irritation |

**Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1):**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Assessment | : | No skin irritation |
| Result | : | No skin irritation |

**Serious eye damage/eye irritation**

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

**Product:**

Remarks : This information is not available.

**Components:**

**White mineral oil (petroleum):**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Result | : | No eye irritation |
| Assessment | : | No eye irritation |
| Method | : | OECD Test Guideline 405 |
| GLP | : | yes |

**Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Result | : | No eye irritation |
| Assessment | : | No eye irritation |
| Method | : | OECD Test Guideline 405 |

**Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1):**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Result | : | No eye irritation |
| Assessment | : | No eye irritation |
| Method | : | OECD Test Guideline 405 |
| GLP | : | yes |

**Respiratory or skin sensitisation**

**Skin sensitisation**

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

**Respiratory sensitisation**

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

**Product:**

Remarks : This information is not available.

**Components:**

**White mineral oil (petroleum):**

| | | |
|---|---|---|
| Test Type | : | Buehler Test |
| Species | : | Guinea pig |
| Assessment | : | Does not cause skin sensitisation. |
| Method | : | OECD Test Guideline 406 |
| Result | : | Does not cause skin sensitisation. |
| GLP | : | yes |

**Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

| | | |
|---|---|---|
| Species | : | Guinea pig |
| Assessment | : | Did not cause sensitisation on laboratory animals. |
| Method | : | OECD Test Guideline 406 |
| Result | : | Did not cause sensitisation on laboratory animals. |

**Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1):**

| | | |
|---|---|---|
| Test Type | : | Maximisation Test |
| Species | : | Guinea pig |
| Assessment | : | Does not cause skin sensitisation. |
| Method | : | OECD Test Guideline 406 |
| Result | : | Does not cause skin sensitisation. |
| GLP | : | yes |

**Germ cell mutagenicity**

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

**Product:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Remarks: No data available |
| Genotoxicity in vivo | : | Remarks: No data available |

**Components:**

**White mineral oil (petroleum):**

| | | |
|---|---|---|
| Germ cell mutagenicity - Assessment | : | Tests on bacterial or mammalian cell cultures did not show mutagenic effects. |

**Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1):**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: Ames test<br>Test system: Salmonella typhimurium<br>Metabolic activation: with and without metabolic activation<br>Method: OECD Test Guideline 471<br>Result: negative<br>GLP: yes<br><br>Test Type: In vitro mammalian cell gene mutation test<br>Test system: Chinese hamster ovary cells<br>Metabolic activation: with and without metabolic activation<br>Method: OECD Test Guideline 476<br>Result: negative<br>GLP: yes |
| Genotoxicity in vivo | : | Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)<br>Species: Chinese hamster (male and female) |

| | | |
|---|---|---|
| | | Application Route: oral (gavage)<br>Method: OECD Test Guideline 474<br>Result: negative<br>GLP: yes |
| Germ cell mutagenicity - Assessment | : | Weight of evidence does not support classification as a germ cell mutagen. |

**Carcinogenicity**

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

**Product:**

| | | |
|---|---|---|
| Remarks | : | No data available |

**Components:**

**White mineral oil (petroleum):**

| | | |
|---|---|---|
| Carcinogenicity - Assessment | : | No evidence of carcinogenicity in animal studies. |

**Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1):**

| | | |
|---|---|---|
| Carcinogenicity - Assessment | : | Not classifiable as a human carcinogen. |

**Reproductive toxicity**

Suspected of damaging fertility. Suspected of damaging the unborn child.

**Product:**

| | | |
|---|---|---|
| Effects on fertility | : | Remarks: No data available |
| Effects on foetal development | : | Remarks: No data available |

**Components:**

**White mineral oil (petroleum):**

| | | |
|---|---|---|
| Reproductive toxicity - Assessment | : | - Fertility -<br>No toxicity to reproduction<br>- Teratogenicity -<br>No effects on or via lactation |

**Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

| | | |
|---|---|---|
| Reproductive toxicity - Assessment | : | - Fertility -<br>Some evidence of adverse effects on sexual function and fertility, based on animal experiments. |

**Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1):**

| | | |
|---|---|---|
| Effects on foetal development | : | Test Type: Developmental Toxicity<br>Species: Rat<br>Application Route: Oral<br>Developmental Toxicity: NOAEL: 150 mg/kg body weight<br>Method: OECD Test Guideline 414<br>Result: Some evidence of adverse effects on development, based on animal experiments.<br>GLP: yes<br>Remarks: Based on data from similar materials |
| Reproductive toxicity - Assessment | : | - Fertility -<br>Some evidence of adverse effects on development, based on animal experiments. |

**STOT - single exposure**

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

**Product:**

| | | |
|---|---|---|
| Remarks | : | No data available |

**Components:**

**White mineral oil (petroleum):**

| | | |
|---|---|---|
| Assessment | : | The substance or mixture is not classified as specific target organ toxicant, single exposure. |

**Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1):**

| | | |
|---|---|---|
| Assessment | : | The substance or mixture is not classified as specific target organ toxicant, single exposure. |

**STOT - repeated exposure**

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

**Product:**

| | | |
|---|---|---|
| Remarks | : | No data available |

**Components:**

**White mineral oil (petroleum):**

| | | |
|---|---|---|
| Assessment | : | The substance or mixture is not classified as specific target organ toxicant, repeated exposure. |

**Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1):**

| | | |
|---|---|---|
| Assessment | : | The substance or mixture is not classified as specific target |

organ toxicant, repeated exposure.

**Repeated dose toxicity**

**Product:**

Remarks : This information is not available.

**Components:**

**Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1):**

| | | |
|---|---|---|
| Species | : | Rat |
| NOAEL | : | 1,000 mg/kg |
| Application Route | : | Oral |
| Exposure time | : | 28 d |
| Method | : | OECD Test Guideline 407 |
| GLP | : | yes |

| | | |
|---|---|---|
| Species | : | Rat |
| NOAEL | : | 50 mg/kg |
| Application Route | : | Oral |
| Exposure time | : | 90 d |
| Number of exposures | : | daily |
| Method | : | OECD Test Guideline 408 |
| GLP | : | yes |
| Remarks | : | Not classified due to data which are conclusive although insufficient for classification. |

**Aspiration toxicity**

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

**Product:**

This information is not available.

**Components:**

**White mineral oil (petroleum):**

May be fatal if swallowed and enters airways.

**Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1):**

No aspiration toxicity classification

**Further information**

**Product:**

Remarks : Information given is based on data on the components and the toxicology of similar products.

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Product:**

| | | |
|---|---|---|
| Toxicity to fish | : | Remarks: No data available |
| Toxicity to daphnia and other aquatic invertebrates | : | Remarks: No data available |
| Toxicity to algae/aquatic plants | : | Remarks: No data available |
| Toxicity to microorganisms | : | Remarks: No data available |

**Components:**

**White mineral oil (petroleum):**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l<br>Exposure time: 96 h<br>Test Type: semi-static test<br>Method: OECD Test Guideline 203 |
| Toxicity to daphnia and other aquatic invertebrates | : | LC50 (Daphnia magna (Water flea)): > 100 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202 |
| Toxicity to algae/aquatic plants | : | NOEC (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201 |
| Toxicity to fish (Chronic toxicity) | : | NOEC (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l<br>Exposure time: 28 d<br>Remarks: The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc. |
| Toxicity to daphnia and other aquatic invertebrates | : | NOEC (Daphnia magna (Water flea)): >= 1,000 mg/l<br>Exposure time: 21 d |

| | | |
|---|---|---|
| (Chronic toxicity) | | Remarks: The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc. |
| Toxicity to microorganisms | : | LC50 (Bacteria): > 1,000 mg/l<br>Exposure time: 40 h<br>Test Type: Growth inhibition |

**Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Danio rerio (zebra fish)): > 100 mg/l<br>Exposure time: 96 h<br>Test Type: static test<br>Method: OECD Test Guideline 203 |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 51 mg/l<br>Exposure time: 48 h<br>Test Type: static test<br>Method: OECD Test Guideline 202 |
| Toxicity to algae/aquatic plants | : | EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l<br>Exposure time: 72 h<br>Test Type: static test<br>Method: OECD Test Guideline 201 |

**Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1):**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Danio rerio (zebra fish)): > 25 mg/l<br>Exposure time: 96 h<br>Test Type: static test<br>Method: OECD Test Guideline 203<br>GLP: yes |
| Toxicity to algae/aquatic plants | : | EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l<br>Exposure time: 72 h<br>Test Type: static test<br>Method: OECD Test Guideline 201<br>GLP: yes |
| Toxicity to microorganisms | : | EC50 (activated sludge): > 100 mg/l<br>Exposure time: 3 h<br>Test Type: Respiration inhibition<br>Method: OECD Test Guideline 209<br>GLP: yes |

**Ecotoxicology Assessment**

| | | |
|---|---|---|
| Acute aquatic toxicity | : | Toxic to aquatic life. |
| Chronic aquatic toxicity | : | Toxic to aquatic life with long lasting effects. |

**Persistence and degradability**

**Product:**

| | | |
|---|---|---|
| Biodegradability | : | Remarks: No data available |
| Physico-chemical removability | : | Remarks: No data available |

**Components:**

**White mineral oil (petroleum):**

| | | |
|---|---|---|
| Biodegradability | : | Biodegradation: 31 %<br>Exposure time: 28 d |

**Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

| | | |
|---|---|---|
| Biodegradability | : | aerobic<br>Inoculum: activated sludge<br>Result: Not rapidly biodegradable<br>Biodegradation: 1 %<br>Exposure time: 28 d<br>Method: OECD Test Guideline 301B<br>GLP: yes |

**Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1):**

| | | |
|---|---|---|
| Biodegradability | : | Primary biodegradation<br>Inoculum: activated sludge<br>Result: Not readily biodegradable.<br>Biodegradation: 2 - 4 %<br>Exposure time: 28 d<br>Method: OECD Test Guideline 301B<br>GLP: yes |

**Bioaccumulative potential**

**Product:**

Bioaccumulation : Remarks: No data available

**Components:**

**White mineral oil (petroleum):**

Partition coefficient: n-octanol/water : log Pow: > 6

**Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

Partition coefficient: n-octanol/water : log Pow: 5.2 - 10.82

**Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1):**

Bioaccumulation : Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 48
Exposure time: 56 d
Concentration: 0.507 mg/l
Method: OECD Test Guideline 305C
GLP: yes

Partition coefficient: n-octanol/water : log Pow: 20

**Mobility in soil**

**Product:**

Mobility : Remarks: No data available

Distribution among environmental compartments : Remarks: No data available

**Other adverse effects**

**Product:**

Additional ecological information : No information on ecology is available.

**Components:**

**White mineral oil (petroleum):**

Results of PBT and vPvB assessment : Not persistent, bioaccumulative, and toxic (PBT).

**Phenol, 2(or 4)-C9-10-branched alkyl derivs., phosphorothioates (3:1):**

| | | |
|---|---|---|
| Results of PBT and vPvB assessment | : | Non-classified PBT substance Non-classified vPvB substance |

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

| | | |
|---|---|---|
| Waste from residues | : | The product should not be allowed to enter drains, water courses or the soil.<br>Do not dispose of with domestic refuse.<br>Dispose of as hazardous waste in compliance with local and national regulations. |
| Contaminated packaging | : | Packaging that is not properly emptied must be disposed of as the unused product.<br>Dispose of waste product or used containers according to local regulations. |

## SECTION 14. TRANSPORT INFORMATION

**International Regulations**

**UNRTDG**
Not regulated as a dangerous good

**IATA-DGR**
Not regulated as a dangerous good

**IMDG-Code**
Not regulated as a dangerous good

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
Not applicable for product as supplied.

**National Regulations**

**NOM-002-SCT**
Not regulated as a dangerous good

**Special precautions for user**
Not applicable

## HYPAR FG-22

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### SECTION 15. REGULATORY INFORMATION

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

Federal Law for the control of chemical precursors, essential chemical products and machinery for producing capsules, tablets and pills. : Not applicable

**International Regulations**

Montreal Protocol : Not applicable

Rotterdam Convention (Prior Informed Consent) : Not applicable

Stockholm Convention (Persistent Organic Pollutants) : Not applicable

### SECTION 16. OTHER INFORMATION

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**Full text of other abbreviations**

| | | |
|---|---|---|
| ACGIH | : | USA. ACGIH Threshold Limit Values (TLV) |
| NOM-010-STPS-2014 | : | Mexico. Norm NOM-010-STPS-2014 on Chemicals Polluting the Work Environment - Identification, Assessment and Control - Appendix 1 Occupational Exposure Limits |
| ACGIH / TWA | : | 8-hour, time-weighted average |
| NOM-010-STPS-2014 / VLE-PPT | : | Time weighted average limit value |

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); LSPN - List of Hazardous Notified Substances (Chile);

MARPOL - International Convention for the Prevention of Pollution from Ships; MERCOSUR - The Agreement for the Facilitation of the Transport of Dangerous Goods; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

|| Relevant changes compared to the last edition are highlighted at the left margin. This version replaces all previous editions.

The information is considered as correct, but not exhaustive, and will be used only as a guide, which is based in the current knowledge of the substance or mixture, and is applicable to proper safety precautions for the product.
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