according to Regulation (EC) No. 1907/2006 - CH



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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : PETAMO GHY 133 N (H)

Article-No. : 094148

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub- : Grease

stance/Mixture

Recommended restrictions

on use

: Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company : Klüber Lubrication München

Geisenhausenerstr. 7 81379 München Deutschland

Tel: +49 (0) 89 7876 0 Fax: +49 (0) 89 7876 333

info@klueber.com

E-mail address of person : mcm@klueber.com

responsible for the SDS Material Compliance Management

National contact : Klüber Lubrication AG (Schweiz)

Thurgauerstrasse 39

8050 Zürich

Tél +41 44 308 69 69 (08.00 - 17.00 h)

Fax +41 44 308 69 44

1.4 Emergency telephone number

Emergency telephone num: Tox Info Suisse (Phone +41 145, 24 h a day)

ber

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Long-term (chronic) aquatic hazard, Cat-H411: Toxic to aquatic life with long lasting effects.

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egory 2

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

Hazard statements : H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : Prevention:

P273 Avoid release to the environment.

Response:

P391 Collect spillage.

Additional Labelling

EUH208 Contains Condensation products of fatty acids, tall oil with 2-amino-2-

ethylpropanediol

May produce an allergic reaction.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Mineral oil.

Synthetic hydrocarbon oil

polyurea

Components

Chemical name	CAS-No.	Classification	specific concen-	Concentration	ı

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	EC-No. Index-No. Registration number		tration limit M-Factor Notes Acute toxicity estimate	(% w/w)
reaction product of diphenylme- thanediisocyanate, octylamine, oleyla- mine and cyclohexyl- amine (1:1.58:0.32:0.097)	430-980-9	Aquatic Chronic4; H413		>= 2,5 - < 10
Phenol, isopropylated, phosphate (3:1)	68937-41-7 273-066-3	Repr.2; H361 STOT RE2; H373 Aquatic Chronic1; H410	M-Factor: /10	>= 1 - < 2,5
Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol	946-010-7	Skin Sens.1; H317		>= 0,1 - < 1
triphenyl phosphate	115-86-6 204-112-2	Aquatic Acute1; H400 Aquatic Chronic2; H411	M-Factor: 1/1	>= 0,25 - < 1
Substances with a work	xplace exposure limit :			
residual oils (petrole- um), hydrotreated	64742-57-0 265-160-8 649-470-00-4	Not classified	Note L	>= 50 - < 70
Dec-1-ene, homopol- ymer, hydrogenated	68037-01-4 500-183-1	Not classified		>= 20 - < 30

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled : Obtain medical attention.

Remove person to fresh air. If signs/symptoms continue, get

medical attention.

Keep patient warm and at rest.

If unconscious, place in recovery position and seek medical



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advice.

Keep respiratory tract clear.

If breathing is irregular or stopped, administer artificial respira-

tion.

In case of skin contact : Take off all contaminated clothing immediately.

Get medical attention immediately if irritation develops and

persists.

Wash clothing before reuse.

Thoroughly clean shoes before reuse. 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.

If eye irritation persists, consult a specialist.

If swallowed : Move the victim to fresh air.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear.

Do not induce vomiting without medical advice.

Obtain medical attention.

Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Allergic appearance

Risks : May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : The first aid procedure should be established in consultation

with the doctor responsible for industrial medicine.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or car-

bon dioxide.

Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion prod: :

ucts

Carbon oxides

Nitrogen oxides (NOx)

Sulphur oxides

Oxides of phosphorus

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5.3 Advice for firefighters

Special protective equipment:

for firefighters

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Exposure to decomposi-

tion products may be a hazard to health.

Further information : Standard procedure for chemical fires.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.

Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release

(dust).

Do not breathe vapours, aerosols.

Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.

If the product contaminates rivers and lakes or drains inform

respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Clean up promptly by sweeping or vacuum.

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes.

For personal protection see section 8.

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

Smoking, eating and drinking should be prohibited in the ap-

plication area.



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Wash hands and face before breaks and immediately after

handling the product.

Do not get in eyes or mouth or on skin.

Do not get on skin or clothing.

Do not ingest. Do not repack.

These safety instructions also apply to empty packaging which

may still contain product residues. Keep container closed when not in use.

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

handling.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

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.

7.3 Specific end use(s)

Specific use(s) : Specific instructions for handling, not required.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
residual oils (petro-	64742-57-0	TWA (inhalable	5 mg/m3	CH SUVA
leum), hydrotreat-		fraction)		(2019-05-21)
ed				
	Further inform	ation: Carcinogenic	Category 3, National Institute	e for Occupa-
	tional Safety a	and Health, Deutsche	e Forschungsgemeinschaft	
Dec-1-ene, homo-	68037-01-4	TWA (inhalable	5 mg/m3	CH SUVA
polymer, hydro-		dust)		(2019-01-22)
genated				
	Further information: Harm to the unborn child is not to be expected when the OEL-value is respected			
Phenol, isopropylated, phosphate (3:1)	68937-41-7	TWA (inhalable dust)	3,5 mg/m3	CH SUVA (2018-01-23)
	Further information: Harm to the unborn child is not to be expected when the			
	OEL-value is respected			
		STEL (inhalable	7 mg/m3	CH SUVA



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		dust)		(2018-01-23)
	Further inform OEL-value is		nborn child is not to be expe	cted when the
Animala a serial sela a a		_ '	0/ 0	CI I CI IVA
triphenyl phos-	115-86-6	TWA (inhalable	3 mg/m3	CH SUVA
phate		dust)		(2018-01-23)
	Further information: National Institute for Occupational Safety and Health			

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
residual oils (petrole- um), hydrotreated	Workers	Inhalation	Long-term systemic effects	2,7 mg/m3
	Workers	Inhalation	Acute systemic effects	5,6 mg/m3
	Workers	Skin contact	Long-term systemic effects	1 mg/kg
O,O,O-triphenyl phosphorothioate	Workers	Inhalation	Long-term systemic effects	1,39 mg/m3
	Workers	Skin contact	Long-term systemic effects	0,4 mg/kg
Phenol, isopropylated, phosphate (3:1)	Workers	Inhalation	Long-term systemic effects	0,145 mg/m3
	Workers	Inhalation	Acute systemic effects	700 mg/m3
	Workers	Skin contact	Long-term systemic effects	0,416 mg/kg bw/day
	Workers	Skin contact	Acute systemic effects	2000 mg/kg bw/day
	Workers	Skin contact	Acute local effects	16 mg/cm2
Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol	Workers	Dermal	Long-term systemic effects	8,33 mg/kg bw/day
triphenyl phosphate	Workers	Inhalation	Long-term systemic effects	5,2 mg/m3
	Workers	Skin contact	Long-term systemic effects	5,55 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
O,O,O-triphenyl phosphorothio-	Sewage treatment plant	1 mg/l
ate		
	Soil	2,37 mg/l
Phenol, isopropylated, phosphate (3:1)	Fresh water	0 mg/l
	Intermittent use/release	0,015 mg/l
	Marine water	0 mg/l
	Sewage treatment plant	100 mg/kg
	Fresh water sediment	0,185 mg/kg dry weight (d.w.)



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	Marine sediment	0,018 mg/kg dry weight (d.w.)
	Soil	2,5 mg/kg dry weight (d.w.)
	Oral	1,85 mg/kg
triphenyl phosphate	Fresh water	0,004 mg/l
	Intermittent use/release	0,003 mg/l
	Marine water	0,0004 mg/l
	Sewage treatment plant	5 mg/l
	Fresh water sediment	1,103 mg/kg dry weight (d.w.)
	Marine sediment	0,11 mg/kg dry weight (d.w.)
	Soil	0,218 mg/kg dry weight (d.w.)
	Oral	16,667 mg/kg

8.2 Exposure controls

Engineering measures

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Eye protection : Safety glasses with side-shields

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.

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

Filter type : Filter type P

Protective measures : The type of protective equipment must be selected according

to the concentration and amount of the dangerous substance

at the specific workplace.

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the spe-

cific work-place.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties



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Physical state : paste

Colour : brown

Odour : characteristic

Odour Threshold : No data available

Melting point/range : No data available

Boiling point/boiling range : No data available

Flammability : Combustible Solids

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Flash point : Not applicable

Auto-ignition temperature : No data available

Decomposition temperature

Decomposition tempera-

ture

No data available

pH : Not applicable

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : Not applicable

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Vapour pressure : < 0,001 hPa (20 °C)

Relative density : 0,900 (20 °C)

Reference substance: Water

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The value is calculated

Density : 0,90 g/cm3

(20 °C)

Bulk density : No data available

Relative vapour density : No data available

9.2 Other information

Explosives : Not explosive

Oxidizing properties : No data available

Self-ignition : No data available

Evaporation rate : No data available

Sublimation point : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No conditions to be specially mentioned.

10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : Remarks: This information is not available.

Acute inhalation toxicity : Remarks: This information is not available.

Acute dermal toxicity : Symptoms: Redness, Local irritation

Components:

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 423

GLP: yes

Assessment: The substance or mixture has no acute oral tox-

icity

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Phenol, isopropylated, phosphate (3:1):

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 200 mg/l

Exposure time: 1 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 10.000 mg/kg

GLP: no

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 425

Assessment: The substance or mixture has no acute oral tox-

icity

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity



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triphenyl phosphate:

Acute oral toxicity : LD50 (Rat): > 20.000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 200 mg/l

Exposure time: 1 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 10.000 mg/kg

Method: OECD Test Guideline 402

residual oils (petroleum), hydrotreated:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 402

Dec-1-ene, homopolymer, hydrogenated:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): 5,2 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

Assessment: The substance or mixture has no acute dermal

toxicity

Skin corrosion/irritation

Product:

Remarks : This information is not available.

Components:

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

Species : Rabbit

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Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

Phenol, isopropylated, phosphate (3:1):

Species : Rabbit Exposure time : 72 h

Assessment : No skin irritation Result : No skin irritation

GLP : no

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Species : reconstructed human epidermis (RhE)

Assessment : No skin irritation Result : No skin irritation

triphenyl phosphate:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

residual oils (petroleum), hydrotreated:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

Dec-1-ene, homopolymer, hydrogenated:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

Serious eye damage/eye irritation

Product:

Remarks : This information is not available.

Components:

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):



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Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes

Phenol, isopropylated, phosphate (3:1):

Species : Rabbit

Assessment : No eye irritation Result : No eye irritation

GLP : no

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Species : Rabbit

Assessment : No eye irritation Result : No eye irritation

triphenyl phosphate:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes

residual oils (petroleum), hydrotreated:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

Dec-1-ene, homopolymer, hydrogenated:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes

Respiratory or skin sensitisation

Product:

Remarks : This information is not available.

Components:

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):



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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

Phenol, isopropylated, phosphate (3:1):

Species : Mouse

Assessment : Did not cause sensitisation on laboratory animals.

Method : OECD Test Guideline 429

Result : Did not cause sensitisation on laboratory animals.

GLP : yes

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Assessment : May cause sensitisation by skin contact.
Result : May cause sensitisation by skin contact.

triphenyl phosphate:

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

GLP : yes

residual oils (petroleum), hydrotreated:

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

Assessment : Does not cause respiratory sensitisation.
Result : Does not cause respiratory sensitisation.

Dec-1-ene, homopolymer, hydrogenated:

Test Type : Maximisation Test Species : Guinea pig

Assessment : Did not cause sensitisation on laboratory animals.

Method : OECD Test Guideline 406

Result : Did not cause sensitisation on laboratory animals.

GLP : yes



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Germ cell mutagenicity

Product:

Genotoxicity in vitro Remarks: No data available

Genotoxicity in vivo Remarks: No data available

Components:

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

Genotoxicity in vitro Test Type: Ames test

> Test system: Salmonella typhimurium Method: OECD Test Guideline 471

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster cells Method: OECD Test Guideline 473

Result: negative

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Genotoxicity in vitro Remarks: In vitro tests did not show mutagenic effects

triphenyl phosphate:

Genotoxicity in vitro Test Type: reverse mutation assay

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

Dec-1-ene, homopolymer, hydrogenated:

sessment

Germ cell mutagenicity- As- : Animal testing did not show any mutagenic effects.

Carcinogenicity

Product:

No data available Remarks



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Components:

triphenyl phosphate:

Carcinogenicity - Assess-

ment

No evidence of carcinogenicity in animal studies.

residual oils (petroleum), hydrotreated:

Carcinogenicity - Assess-

ment

Not classifiable as a human carcinogen.

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

Remarks: No data available

Components:

Phenol, isopropylated, phosphate (3:1):

Reproductive toxicity - As-

sessment

: - Fertility -

Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

- Teratogenicity -

Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Reproductive toxicity - As-

: - Fertility -

sessment

Animal testing did not show any effects on fertility.

triphenyl phosphate:

Effects on foetal develop-

ment

Species: Rabbit

Application Route: Oral

General Toxicity Maternal: NOAEL: >= 200 mg/kg body weight

Teratogenicity: NOAEL: >= 200 mg/kg body weight

Developmental Toxicity: NOAEL: >= 200 mg/kg body weight Embryo-foetal toxicity: NOAEL: >= 200 mg/kg body weight

Method: OECD Test Guideline 414

Result: No effects on fertility and early embryonic develop-

ment were detected.

Reproductive toxicity - As-

sessment

: - Fertility -

No toxicity to reproduction

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- Teratogenicity -

No effects on or via lactation

Dec-1-ene, homopolymer, hydrogenated:

Reproductive toxicity - As- : - Fertility -

sessment No toxicity to reproduction

STOT - single exposure

Components:

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

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

organ toxicant, single exposure.

STOT - repeated exposure

Components:

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

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

organ toxicant, repeated exposure.

Phenol, isopropylated, phosphate (3:1):

Exposure routes : Ingestion

Target Organs : ovaries, Testes, Liver, Adrenal gland

Assessment : The substance or mixture is classified as specific target organ

toxicant, repeated exposure, category 2.

Repeated dose toxicity

Product:

Remarks : This information is not available.

Components:

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

Species : Rat

NOAEL : 1.000 mg/kg

Application Route : Oral

Method : OECD Test Guideline 407

triphenyl phosphate:



according to Regulation (EC) No. 1907/2006 - CH



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Species : Rat

NOAEL : 105 mg/kg

Application Route : Oral

Method : OECD Test Guideline 408

Species : Rabbit
NOAEL : 1.000 mg/kg
Application Route : Dermal

Aspiration toxicity

Product:

This information is not available.

Components:

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

No aspiration toxicity classification

Phenol, isopropylated, phosphate (3:1):

No aspiration toxicity classification

triphenyl phosphate:

No aspiration toxicity classification

residual oils (petroleum), hydrotreated:

No aspiration toxicity classification

Dec-1-ene, homopolymer, hydrogenated:

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

12.1 Toxicity

Product:

Toxicity to fish : Remarks: Toxic to aquatic organisms, may cause long-term

according to Regulation (EC) No. 1907/2006 - CH



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adverse effects in the aquatic environment.

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:

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

Toxicity to microorganisms : EC50 (activated sludge): > 1.000 mg/l

Exposure time: 3 h

Test Type: Respiration inhibition Method: OECD Test Guideline 209

GLP: yes

Phenol, isopropylated, phosphate (3:1):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1,6 mg/l

Exposure time: 96 h Test Type: static test

Remarks: Information given is based on tests on the mixture

itself.

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 2,44 mg/l

Exposure time: 48 h Test Type: semi-static test

Remarks: Information given is based on tests on the mixture

a brand of

FREUDENBERG

according to Regulation (EC) No. 1907/2006 - CH



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itself.

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): > 2,5

mg/

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

Remarks: Information given is based on tests on the mixture

itself.

Toxicity to fish (Chronic tox-

icity)

NOEC: 0,0031 mg/l Exposure time: 33 d

Species: Pimephales promelas (fathead minnow)

Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0,0415 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

M-Factor (Chronic aquatic

toxicity)

10

triphenyl phosphate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,4 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0,36 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to algae/aquatic

plants

NOEC (Pseudokirchneriella subcapitata (green algae)): 0,25

mg/l

Exposure time: 96 h

Method: OECD Test Guideline 201

EL10 (Pseudokirchneriella subcapitata (green algae)): 0,25

mg/l

Exposure time: 96 h

Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox-

icity)

: 1

Toxicity to microorganisms : NOEC (activated sludge): 100 mg/l

Exposure time: 28 h

Toxicity to fish (Chronic tox-

icity)

NOEC: 0,037 mg/l Exposure time: 30 d

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Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0,254 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

M-Factor (Chronic aquatic

toxicity)

: 1

residual oils (petroleum), hydrotreated:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 10.000 mg/l

Exposure time: 48 h Test Type: Immobilization

Dec-1-ene, homopolymer, hydrogenated:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 1.000 mg/l

Exposure time: 96 h Test Type: semi-static test

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): > 1.000 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

EL50 (Selenastrum capricornutum (green algae)): > 1.000

mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOELR: 125 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: semi-static test

Method: OECD Test Guideline 211

GLP: yes

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available



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Physico-chemical removabil- : Remarks: No data available

Components:

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

Biodegradability Test Type: aerobic

> Inoculum: activated sludge Result: Not readily biodegradable.

Biodegradation: 23,9 % Exposure time: 28 d

Method: OECD Test Guideline 301F

GLP: yes

Phenol, isopropylated, phosphate (3:1):

Biodegradability Result: Not rapidly biodegradable

> Biodegradation: 17,9 % Exposure time: 28 d

Method: OECD Test Guideline 301D

GLP: yes

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Biodegradability Result: Not rapidly biodegradable

triphenyl phosphate:

Biodegradability Test Type: aerobic

> Inoculum: activated sludge Result: Readily biodegradable. Biodegradation: 83 - 94 %

Exposure time: 28 d

Method: OECD Test Guideline 301C

residual oils (petroleum), hydrotreated:

Biodegradability : Result: Not rapidly biodegradable

Dec-1-ene, homopolymer, hydrogenated:

Biodegradability : Result: Not readily biodegradable.

12.3 Bioaccumulative potential

Product:

Bioaccumulation Remarks: This mixture contains no substance considered to

be persistent, bioaccumulating and toxic (PBT).

This mixture contains no substance considered to be very

persistent and very bioaccumulating (vPvB).



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Components:

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexyl-

amine (1:1.58:0.32:0.097):

Partition coefficient: n- : log Pow: > 6 (20 °C)

octanol/water Method: OECD Test Guideline 117

Phenol, isopropylated, phosphate (3:1):

Partition coefficient: n- : log Pow: 4,92 - 5,17 (25 °C)

octanol/water

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Bioaccumulation : Bioconcentration factor (BCF): < 100

Partition coefficient: n-

octanol/water

log Pow: 9,01

triphenyl phosphate:

Bioaccumulation : Species: Oryzias latipes (Orange-red killifish)

Exposure time: 18 d Concentration: 0,01 mg/l

Bioconcentration factor (BCF): 144

Partition coefficient: n-

octanol/water

log Pow: 4,6 (20 °C)

Dec-1-ene, homopolymer, hydrogenated:

Partition coefficient: n- : log Pow: > 6,5 (20 °C)

octanol/water pH: 7

Method: OECD Test Guideline 117

GLP: yes

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

Distribution among environ-

mental compartments

Remarks: No data available

12.5 Results of PBT and vPvB assessment

Components:

Phenol, isopropylated, phosphate (3:1):

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Assessment : Non-classified PBT substance. Non-classified vPvB sub-

stance.

Dec-1-ene, homopolymer, hydrogenated:

Assessment : Non-classified PBT substance. Non-classified vPvB sub-

stance.

12.6 Other adverse effects

Product:

Additional ecological infor-

mation

: Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

Do not dispose of with domestic refuse.

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.

Dispose of waste product or used containers according to

local regulations.

The following Waste Codes are only suggestions:

Waste Code : used product, unused product

12 01 12*, spent waxes and fats

uncleaned packagings

15 01 10, packaging containing residues of or contaminated

by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

ADN : UN 3077 **ADR** : UN 3077



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 RID
 : UN 3077

 IMDG
 : UN 3077

 IATA
 : UN 3077

14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Triaryl Phosphate Isopropylated, triphenyl phosphate)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S

(Triaryl Phosphate Isopropylated, triphenyl phosphate)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Triaryl Phosphate Isopropylated, triphenyl phosphate)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Triaryl Phosphate Isopropylated, triphenyl phosphate)

IATA : Environmentally hazardous substance, solid, n.o.s.

(Triaryl Phosphate Isopropylated, triphenyl phosphate)

14.3 Transport hazard class(es)

ADN : 9
ADR : 9
RID : 9
IMDG : 9
IATA : 9

14.4 Packing group

ADN

Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9

ADR

Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9

RID

Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9



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IMDG

Packing group : III Labels : 9

EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo : 956

aircraft)

Packing instruction (LQ) : Y956
Packing group : III

Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passen: 956

ger aircraft)

Packing instruction (LQ) : Y956
Packing group : III

Labels : Miscellaneous

14.5 Environmental hazards

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on : Not applicable



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the market and use of certain dangerous substances, preparations and articles (Annex XVII)

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

(EU SVHC)

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH),

Article 57). Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

(EU. REACH - Annex XIV)

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer (EC 1005/2009)

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast) (EU POP)

(EU POP)

PIC Ordinance, ChemPICO (814.82) (CH PIC)

: Not applicable

Not applicable

Regulation (EU) 2019/1148 on the marketing and use of :

explosives precursors

Not applicable

Ordinance on Protection against Major Accidents

Threshold quantity according to Major Accidents Ordi-

nance (MAO 814.012)

20.000 kg

Volatile organic compounds : Law on the incentive tax for volatile organic compounds

(VOCV) no VOC duties

15.2 Chemical safety assessment

This information is not available.

SECTION 16: Other information

Full text of R-Phrases

Note L : The classification as a carcinogen need not apply if it can be

shown that the substance contains less than 3 % DMSO extract as measured by IP 346 "Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions - Dimethyl sulphoxide extraction refractive index method", Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

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Full text of H-Statements

H317 : May cause an allergic skin reaction.

H361 : Suspected of damaging fertility or the unborn child.

H373 : May cause damage to organs through prolonged or repeated

exposure if swallowed.

H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long lasting effects.
H411 : Toxic to aquatic life with long lasting effects.

H413 : May cause long lasting harmful effects to aquatic life.

Full text of other abbreviations

CH SUVA : Switzerland. Limit values at the work place

CH SUVA / TWA : Time Weighted Average CH SUVA / STEL : Short Term Exposure Limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; GHS - Globally Harmonized 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 Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; 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); MARPOL -International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance 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

Classification of the mixture:

Classification procedure:



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Aquatic Chronic 2 H411 Calculation method

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