

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : IKV-TRIBOCHAIN 250 HT  
Product code : IRAMCHK01  
Type of product : Oil

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

##### 1.2.1. Relevant identified uses

Main use category : Professional use  
Industrial/Professional use spec : Industrial  
Function or use category : Lubricants and additives

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

IKV TRIBOLOGIE  
ZI de la Gare BP31  
F-26260 St Donat sur l'Herbasse - France  
T +33 (0)4 75 45 06 45 - F +33 (0)4 75 45 28 09  
[MSDS@ikv.fr](mailto:MSDS@ikv.fr) - [www.ikvtribologie.com](http://www.ikvtribologie.com)

#### 1.4. Emergency telephone number

Emergency number : France\_Tel ORFILA (INRS) : 33 (0)1 45.42.59.59 - EU\_Tel : 112

Country	Organisation/Company	Address	Emergency number	Comment
Greece	Poisons Information Centre Children's Hospital "Aglaia. Kyriakou"	11527 Athens	+30 10 779 3777	
Israel	Israel Poison Information Center Rambam Health Care Campus	6 Ha'Aliya Street 31096 Haifa	+972 4 854 1900	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD Msida	+356 2545 6504	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412  
Full text of H statements : see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Signal word (CLP) : -  
Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.

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Precautionary statements (CLP) : P273 - Avoid release to the environment.  
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Phosphorothionic acid, tris(2(or 4)-(C9-10-branched alkyl)phenyl) ester	(CAS-No.) 126019-82-7 (EC-No.) 406-940-1 (REACH-no) 01-0000015643-71 / 01-2119930067-42	1 – 5	Aquatic Chronic 2, H411
Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates	(CAS-No.) 80939-62-4 (EC-No.) 279-632-6 (REACH-no) 01-2119976322-36	1 – 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : In case of eye contact, immediately rinse with clean water for 10-15 minutes. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : Inhalation of mists or vapours at elevated temperatures may cause respiratory irritation.

Symptoms/effects after skin contact : Repeated or prolonged skin contact may cause dermatitis and defatting.

Symptoms/effects after eye contact : Redness, pain.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Explosion hazard : Not applicable.

Reactivity in case of fire : Under fire conditions closed containers may rupture or explode.

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Hazardous decomposition products in case of fire : Thermal decomposition generates : fume. Carbon dioxide. Carbon monoxide. irritating vapours may be released.

### 5.3. Advice for firefighters

Precautionary measures fire : Evacuate the personnel away from the fumes. Do not breathe fumes from fires or vapours from decomposition.

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : May be dangerously slippery if spilled. Do not get in eyes, on skin, or on clothing. Remove ignition sources.

#### 6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing. Do not attempt to take action without suitable protective equipment.

Emergency procedures : Do not breathe fumes from fires or vapours from decomposition. Keep public away from danger area.

#### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. This material and its container must be disposed of in a safe way, and as per local legislation.

### 6.4. Reference to other sections

See Heading 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapour. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. To avoid thermal decomposition, do not overheat. No open flames. No smoking. Use personal protective equipment as required. Avoid contact with skin, eyes and clothing. Material can accumulate some static charge during transfer. Use only non-sparking tools. Take precautionary measures against static discharge.

Hygiene measures : Do not eat, drink or smoke when using this product. Provide local exhaust or general room ventilation. Always wash hands after handling the product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container closed when not in use. Store in dry, cool, well-ventilated area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Storage temperature : 5 – 40 °C

Heat and ignition sources : Store in tightly closed, properly ventilated containers away from heat, sparks, open flame.

Storage area : Store in a well-ventilated place.

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### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Phosphorothionic acid, tris(2(or 4)-(C9-10-branched alkyl)phenyl) ester (126019-82-7)

##### DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	46 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	16 mg/m <sup>3</sup>

##### DNEL/DMEL (General population)

Long-term - systemic effects, oral	1.6 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2.9 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	16 mg/kg bodyweight/day

##### PNEC (Water)

PNEC aqua (freshwater)	0.21 mg/l
PNEC aqua (marine water)	0.21 mg/l

##### PNEC (Sediment)

PNEC sediment (freshwater)	1050 mg/kg dwt
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##### PNEC (Soil)

PNEC soil	210 mg/kg dwt
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### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Hand protection:

Chemical resistant gloves (according to European standard NF EN 374 or equivalent). Nitrile-rubber protective gloves. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

#### Eye protection:

Chemical goggles or safety glasses

#### Skin and body protection:

In case of possible repeated skin contact wear protective clothing

#### Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

#### Other information:

Do not eat, drink or smoke during use.

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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Oil.
Colour	: Yellow.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 265 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: ≈ 0.96
Solubility	: Material insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: 250 mm <sup>2</sup> /s (40°C) - ASTM D-445
Viscosity, dynamic	: No data available
Explosive properties	: Not applicable.
Oxidising properties	: Not applicable.
Explosive limits	: No data available

#### 9.2. Other information

VOC content	: 0 %
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Not expected to present a significant hazard under anticipated conditions of normal use.

#### 10.2. Chemical stability

The product is stable at normal handling and storage conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

When heated to decomposition, emits dangerous fumes. Do not breathe fumes from fires or vapours from decomposition.

#### 10.5. Incompatible materials

Oxidizing agent.

#### 10.6. Hazardous decomposition products

Thermal decomposition generates : fume. Carbon monoxide. Carbon dioxide. Toxic vapours.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified

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Acute toxicity (inhalation) : Not classified

### Amines, C11-14-branched alkyl, monoethyl and diethyl phosphates (80939-62-4)

LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg

### Phosphorothionic acid, tris(2(or 4)-(C9-10-branched alkyl)phenyl) ester (126019-82-7)

LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

### IKV-TRIBOCHAIN 250 HT

Viscosity, kinematic	250 mm <sup>2</sup> /s (40°C) - ASTM D-445
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Potential adverse human health effects and symptoms : Repeated or prolonged skin contact may cause dermatitis and defatting. Inhalation of mists or vapours at elevated temperatures may cause respiratory irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Notify authorities if product enters sewers or public waters. Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.  
Hazardous to the aquatic environment, short-term (acute) : Not classified  
Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

### Amines, C11-14-branched alkyl, monoethyl and diethyl phosphates (80939-62-4)

LC50 fish 1	5.5 mg/l (96h - Oncorhynchus mykiss)
EC50 Daphnia 1	1.2 mg/l (48h)

### 12.2. Persistence and degradability

#### IKV-TRIBOCHAIN 250 HT

Persistence and degradability	Not established.
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### 12.3. Bioaccumulative potential

#### IKV-TRIBOCHAIN 250 HT

Bioaccumulative potential	Not established.
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### 12.4. Mobility in soil

#### IKV-TRIBOCHAIN 250 HT

Ecology - soil

Not established.

### 12.5. Results of PBT and vPvB assessment

#### IKV-TRIBOCHAIN 250 HT

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### 12.6. Other adverse effects

Additional information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.  
Waste treatment methods : Comply with applicable regulations.  
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

No data available

#### Transport by sea

No data available

#### Air transport

No data available

#### Inland waterway transport

No data available

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### Rail transport

No data available

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list  $\geq 0,1\%$  / SCL

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content : 0 %

#### 15.1.2. National regulations

##### France

Occupational diseases : RG 36 - Affections provoquées par les huiles et graisses d'origine minérale ou de synthèse  
RG 49 - Affections cutanées provoquées par les amines aliphatiques, alicycliques ou les éthanolamines

##### Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

##### Poland

Polish National Regulations : Regulation of Polish law.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Indication of changes:			
Section	Changed item	Change	Comments
7.2	Storage conditions	Modified	
7.2	Storage temperature	Modified	
10.4	Conditions to avoid	Modified	

Abbreviations and acronyms:	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road



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ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IATA	International Air Transport Association
IARC	International Agency for Research on Cancer
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
EC50	Median effective concentration
PNEC	Predicted No-Effect Concentration
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
LD50	Median lethal dose
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
ATE	Acute Toxicity Estimate
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
vPvB	Very Persistent and Very Bioaccumulative

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

### Classification according to Regulation (EC) No. 1272/2008 [CLP]:

Aquatic Chronic 3	H412
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### Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.