

OKS 352

Version	Revision Date:	Date of last issue: 08.09.2021	Print Date:
1.5	24.01.2023	Date of first issue: 14.07.2014	24.01.2023

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : OKS 352

Manufacturer or supplier's details

Company name of supplier : OKS Spezialechmierstoffe GmbH
Ganghoferstr. 47
D-82216 Maisach-Gernlinden
Tel.: +49 8142 3051 500
Fax.: +49 8142 3051 599
info@oks-germany.com

E-mail address of person responsible for the SDS : mcm@oks-germany.com
Material Compliance Management

Emergency telephone number : +7 495 628 1687
+49 8142 3051 517

Recommended use of the chemical and restrictions on use

Recommended use : Lubricant

Restrictions on use : Restricted to professional users.

2. HAZARDS IDENTIFICATION


GHS Classification (According to GOST 32423, GOST 32424 and GOST 32425)

Reproductive toxicity : Category 2

Short-term (acute) aquatic hazard : Category 3

Long-term (chronic) aquatic hazard : Category 3

GHS-Labeling (According to GOST 31340)

Hazard pictograms : 

Signal word : Warning

Hazard statements : H361 Suspected of damaging fertility or the unborn child.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**

OKS 352

Version 1.5	Revision Date: 24.01.2023	Date of last issue: 08.09.2021 Date of first issue: 14.07.2014	Print Date: 24.01.2023
----------------	------------------------------	---	---------------------------

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P273 Avoid release to the environment.
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 which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture
Chemical nature : ester oil
Synthetic hydrocarbon oil

Components

Chemical name	Concentration (% w/w)	Occupational Exposure Limits		CAS-No.	EC-No.
		MAC value mg/m3 / TSEL value	Hazard Class		
tris(methylphenyl) phosphate	>= 1 - < 2,5	MPC-STEL: 0,1 mg/m3 Data Source: RU OEL	1	1330-78-5	809-930-9
		MPC-STEL: 0,5 mg/m3 Data Source: RU OEL	2		
thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]	>= 1 - < 10	MPC-STEL: 10 mg/m3 Data Source: RU OEL	4	41484-35-9	255-392-8

4. FIRST AID MEASURES

OKS 352

Version 1.5	Revision Date: 24.01.2023	Date of last issue: 08.09.2021 Date of first issue: 14.07.2014	Print Date: 24.01.2023
----------------	------------------------------	---	---------------------------

- 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 advice.
Keep respiratory tract clear.
If breathing is irregular or stopped, administer artificial respiration.
- 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.
Obtain medical attention.
Rinse mouth with water.
Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed : No information available.
None known.
- Notes to physician : No information available.

5. FIREFIGHTING MEASURES

Flammable properties

- Flash point : 264 °C
Method: DIN 51758
- Ignition temperature : No data available
- Upper explosion limit / Upper flammability limit : No data available
- Lower explosion limit / Lower flammability limit : No data available

OKS 352

Version	Revision Date:	Date of last issue: 08.09.2021	Print Date:
1.5	24.01.2023	Date of first issue: 14.07.2014	24.01.2023

- Flammability (solid, gas) : Not applicable
- 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
Nitrogen oxides (NOx)
- Further information : Standard procedure for chemical fires.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.
Exposure to decomposition products may be a hazard to health.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.
Use personal protective equipment.
Ensure adequate ventilation.
Do not breathe vapours or spray mist.
Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- 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).

7. HANDLING AND STORAGE

- Advice on safe handling : Do not use in areas without adequate ventilation.
Do not breathe vapours or spray mist.
In case of insufficient ventilation, wear suitable respiratory equipment.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Wash hands and face before breaks and immediately after

OKS 352

Version	Revision Date:	Date of last issue: 08.09.2021	Print Date:
1.5	24.01.2023	Date of first issue: 14.07.2014	24.01.2023

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.
Do not re-use empty containers.
These safety instructions also apply to empty packaging which may still contain product residues.
Keep container closed when not in use.

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Data Source
tris(methylphenyl) phosphate	1330-78-5	MPC-STEL (aerosol)	0,1 mg/m3	RU OEL (2021-02-03)
Further information: Class 1 - Extremely dangerous				
		MPC-STEL (aerosol)	0,5 mg/m3	RU OEL (2021-02-03)
Further information: Class 2 - Highly dangerous				
thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]	41484-35-9	MPC-STEL (aerosol)	10 mg/m3	RU OEL (2021-02-03)
Further information: Class 4 - Low hazard				

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 : butyl-rubber
Break through time : > 10 min
Protective index : Class 1

OKS 352

Version 1.5	Revision Date: 24.01.2023	Date of last issue: 08.09.2021 Date of first issue: 14.07.2014	Print Date: 24.01.2023
----------------	------------------------------	---	---------------------------

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

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : yellow
- Odour : characteristic
- Odour Threshold : No data available
- pH : Not applicable
substance/mixture is non-polar/aprotic
- Melting point/range : No data available
- Boiling point/boiling range : 245 °C
(1.013 hPa)
- Flash point : 264 °C
Method: DIN 51758
- Evaporation rate : No data available
- Flammability (solid, gas) : Not applicable
- Self-ignition : No data available

OKS 352

Version	Revision Date:	Date of last issue: 08.09.2021	Print Date:
1.5	24.01.2023	Date of first issue: 14.07.2014	24.01.2023

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : < 0,01 hPa (20 °C)

Relative vapour density : No data available

Relative density : 0,89 (20 °C)
Reference substance: Water
The value is calculated

Density : 0,89 g/cm³ (20 °C)

Bulk density : No data available

Solubility(ies)
Water solubility : immiscible

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 : 260 mm²/s (40 °C)

Explosive properties : Not explosive

Oxidizing properties : No data available

Sublimation point : No data available

Metal corrosion rate : Not corrosive to metals

10. STABILITY AND REACTIVITY

Reactivity : No hazards to be specially mentioned.

Chemical stability : Stable under normal conditions.

OKS 352

Version 1.5	Revision Date: 24.01.2023	Date of last issue: 08.09.2021 Date of first issue: 14.07.2014	Print Date: 24.01.2023
----------------	------------------------------	---	---------------------------

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.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

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

Acute inhalation toxicity : Remarks: Toxic by inhalation.

Components:

tris(methylphenyl) phosphate:

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

Acute inhalation toxicity : LC50 (Rat): 11,1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

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

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 6,3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

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

OKS 352

Version	Revision Date:	Date of last issue: 08.09.2021	Print Date:
1.5	24.01.2023	Date of first issue: 14.07.2014	24.01.2023

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:

tris(methylphenyl) phosphate:

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

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

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

Serious eye damage/eye irritation

Product:

Remarks : This information is not available.

Components:

tris(methylphenyl) phosphate:

Species : Rabbit
Result : No eye irritation
Assessment : No eye irritation

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

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

OKS 352

Version	Revision Date:	Date of last issue: 08.09.2021	Print Date:
1.5	24.01.2023	Date of first issue: 14.07.2014	24.01.2023

Respiratory or skin sensitisation

Product:

Remarks : This information is not available.

Components:

tris(methylphenyl) phosphate:

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

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

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

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Components:

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Genotoxicity in vitro : Test Type: Ames test
Method: OECD Test Guideline 471
Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Hamster
Method: Mutagenicity (micronucleus test)
Result: negative

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

OKS 352

Version 1.5	Revision Date: 24.01.2023	Date of last issue: 08.09.2021 Date of first issue: 14.07.2014	Print Date: 24.01.2023
----------------	------------------------------	---	---------------------------

Carcinogenicity

Product:

Remarks : No data available

Components:

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

Components:

tris(methylphenyl) phosphate:

Reproductive toxicity - Assessment : - Fertility -
Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Reproductive toxicity - Assessment : - Fertility -
No toxicity to reproduction
- Teratogenicity -
Animal testing did not show any effects on foetal development.

STOT - single exposure

Components:

tris(methylphenyl) phosphate:

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

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

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

OKS 352

Version	Revision Date:	Date of last issue: 08.09.2021	Print Date:
1.5	24.01.2023	Date of first issue: 14.07.2014	24.01.2023

organ toxicant, single exposure.

STOT - repeated exposure

Components:

tris(methylphenyl) phosphate:

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:

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Species : Rat
NOAEL : \geq 138 mg/kg
Application Route : Oral
Method : OECD Test Guideline 408

Aspiration toxicity

Product:

This information is not available.

Components:

tris(methylphenyl) phosphate:

No aspiration toxicity classification

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

No aspiration toxicity classification

Further information

Product:

Remarks : Possible risk of irreversible effects.
Danger of very serious irreversible effects.

OKS 352

Version	Revision Date:	Date of last issue: 08.09.2021	Print Date:
1.5	24.01.2023	Date of first issue: 14.07.2014	24.01.2023

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

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

tris(methylphenyl) phosphate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,6 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 0,146 mg/l
aquatic invertebrates Exposure time: 48 h
Test Type: static test

M-Factor (Acute aquatic : 1
toxicity)

Toxicity to fish (Chronic : NOEC (Jordanella floridae (flagfish)): 0,01 mg/l
toxicity) Exposure time: 28 d
Test Type: semi-static test

M-Factor (Chronic aquatic : 1
toxicity)

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 57 mg/l
Exposure time: 96 h

OKS 352

Version	Revision Date:	Date of last issue: 08.09.2021	Print Date:
1.5	24.01.2023	Date of first issue: 14.07.2014	24.01.2023

Test Type: static test
Method: OECD Test Guideline 203
Remarks: Aquatic toxicity is unlikely due to low solubility.

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
Remarks: No toxicity at the limit of solubility

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
Remarks: No toxicity at the limit of solubility

NOEC (Desmodesmus subspicatus (green algae)): 100 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes
Remarks: No toxicity at the limit of solubility

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): > 10 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211

Toxicity to microorganisms : EC20 (activated sludge): > 100 mg/l
Exposure time: 3 h
Test Type: static test
Method: OECD Test Guideline 209

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Persistence and degradability

Product:

Biodegradability : Remarks: No data available

OKS 352

Version	Revision Date:	Date of last issue: 08.09.2021	Print Date:
1.5	24.01.2023	Date of first issue: 14.07.2014	24.01.2023

Physico-chemical
removability : Remarks: No data available

Components:

tris(methylphenyl) phosphate:

Biodegradability : Result: Not rapidly biodegradable
Biodegradation: 24 %
Exposure time: 28 d

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Biodegradability : Primary biodegradation
Inoculum: activated sludge
Result: Not rapidly biodegradable
Biodegradation: 7 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

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).

Components:

tris(methylphenyl) phosphate:

Partition coefficient: n-
octanol/water : log Pow: 5,93

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Bioaccumulation : Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): <= 12
Exposure time: 56 d
Method: OECD Test Guideline 305C

Partition coefficient: n-
octanol/water : log Pow: 10 (25 °C)

Mobility in soil

Product:

OKS 352

Version 1.5	Revision Date: 24.01.2023	Date of last issue: 08.09.2021 Date of first issue: 14.07.2014	Print Date: 24.01.2023
----------------	------------------------------	---	---------------------------

Mobility : Remarks: No data available

Distribution among environmental compartments : Remarks: No data available

Other adverse effects

Product:

Additional ecological information : Harmful to aquatic life with long lasting effects.

Components:

tris(methylphenyl) phosphate:

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

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

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

Hygienic standards:

(Allowable concentration in air, water, including fishery waters, soil)

Components	Air	Water	Soil	Data Source
tris(methylphenyl) phosphate	TSEL value: 0,01 mg/m ³	Maximum Allowable Concentration: 0,005 mg/l Limiting health hazard indicator: sanitary-toxicological Hazard class: Class 2 - highly dangerous	No data available	List 2 List 4
thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]	TSEL value: 0,1 mg/m ³	No data available	No data available	List 2

For explanation of abbreviations see section 16.

OKS 352

Version	Revision Date:	Date of last issue: 08.09.2021	Print Date:
1.5	24.01.2023	Date of first issue: 14.07.2014	24.01.2023

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : 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 : unused product
13 02 06*, synthetic engine, gear and lubricating oils

uncleaned packagings
15 01 10*, packaging containing residues of or contaminated by hazardous substances

14. TRANSPORT INFORMATION

ADR

Not regulated as a dangerous good

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.

Special precautions for user

Not applicable

15. REGULATORY INFORMATION

National regulatory information

Federal Law of 21.07.1997 No. 116-FZ (amended on 11.06.2021) "On industrial safety of hazardous production facilities".

Federal Law of 24.06.1998 No. 89-FZ (amended on 02.07.2021) "On production and

OKS 352

Version	Revision Date:	Date of last issue: 08.09.2021	Print Date:
1.5	24.01.2023	Date of first issue: 14.07.2014	24.01.2023

consumption waste".

Federal Law of 30.03.1999 No. 52-FZ (amended on 02.07.2021) "On the Sanitary and Epidemiological Well-Being of the Population" (amended and supplemented, entered into force on 31.10.2021).

Federal Law of 04.05.1999 No. 96-FZ "On the protection of atmospheric air" (as amended on December 8, 2020).

Federal Law of 27.12.2002 No. 184-FZ (amended on 02.07.2021) "On Technical Regulation" (amended and supplemented, entered into force on 01.09.2021).

Federal Law of 10.01.2002 No. 7-FZ (amended on 02.07.2021) "On environmental protection".

Federal Law of 22.07.2008 No. 123-FZ "Technical Regulations on Fire Safety Requirements"

TECHNICAL REGULATIONS OF THE CUSTOMS UNION TR CU 030/2012 On requirements for lubricants, oils and special fluids (amended on 03.03.2017).

International Regulations

Montreal Protocol : Not applicable

Rotterdam Convention (Prior Informed Consent) : Not applicable

Stockholm Convention (Persistent Organic Pollutants) : Not applicable

16. OTHER INFORMATION

List of data sources used in the preparation of the Safety Data Sheet

GOST 30333-2007. Interstate standard. Safety data sheet for chemical products. Primary requirements.

GOST 12.1.004-91 System of labor safety standards (SSBT). Fire safety. General requirements.

GOST 12.1.007-76 Occupational safety standards system. Noxious substances. Classification and general safety requirements

GOST 12.1.044-89 SSBT. Fire and explosion hazard of substances and materials. Nomenclature of indicators and methods for their determination.

GOST 12.4.021 System of labor safety standards (SSBT). Ventilation systems. General requirements.

GOST 12.4.137-2001 Special footwear with leather uppers for protection against oil, oil products, acids, alkalis, non-toxic and explosive dust. Technical conditions.

GOST 12.4.252-2013 System of labor safety standards (SSBT). Means of individual protection of hands. Gloves. General technical requirements. Test methods.

GOST 14192-96. Interstate standard. Cargo marking. Minsk, 1998.

GOST 19433-88 Dangerous goods. Classification and labeling.

GOST 31340-2013. Interstate standard. Precautionary labeling of chemical products. General requirements.

GOST 32419-2013 Classification of the hazard of chemical products. General requirements.

GOST 32421-2013 Classification of chemical products, the hazard of which is due to physical and chemical properties. Test methods for explosive chemical products.

GOST 32423-2013 Hazard classification of mixed chemical products by their effects on the body.

GOST 32424-2013 Classification of the hazard of chemical products by their impact on the environment. Basic provisions.

OKS 352

Version	Revision Date:	Date of last issue: 08.09.2021	Print Date:
1.5	24.01.2023	Date of first issue: 14.07.2014	24.01.2023

GOST 32425-2013 Hazard classification of mixed chemical products in terms of environmental impact.
GOST R 53264-2019 Fire fighting equipment. Special protective clothing for firefighters. General technical requirements. Test methods.
GOST R 53265-2019 Fire fighting equipment. Personal protective equipment for the feet of the firefighter. General technical requirements. Test methods.
GOST R 53268-2009 Fire fighting equipment. Fire rescue belts. General technical requirements. Test methods.
GOST R 53269-2019 Fire fighting equipment. Firefighters helmets. General technical requirements. Test methods.
SanPiN 1.2.2353-08 "Carcinogenic factors and basic requirements for the prevention of carcinogenic hazard".
SanPiN 1.2.3685-21 "Hygienic standards and requirements for ensuring the safety and (or) harmlessness to humans of environmental factors" dated 28.01.2021.
SanPiN 2.1.3684-21 "Sanitary and epidemiological requirements for the maintenance of the territories of urban and rural settlements, for water bodies, drinking water and drinking water supply, atmospheric air, soils, living quarters, the operation of industrial, public premises, the organization and implementation of sanitary and anti-epidemic (preventive) measures".
SanPiN 2.2.0.555-96. 2.2. Labor hygiene. Hygienic requirements for working conditions for women. Sanitary rules and regulations.
Carriage of dangerous goods, International maritime dangerous goods (IMDG) code.
Water quality standards for fishery water bodies, including standards for maximum permissible concentrations of harmful substances in the waters of fishery water bodies (approved by order of the Ministry of Agriculture of Russia dated December 13, 2016 No. 552).
Regulations for the carriage of dangerous goods (Appendix 1 and 2) to the Agreement on International Goods Transport by Rail (SMGS), 2009.
Agreement on International Goods Transport by Rail (SMGS).
UN Recommendations on the Transport of Dangerous Goods. Typical rules. Twenty-second revised edition. United Nations, New York and Geneva, 2021.
Montreal Protocol (Ozone Depleting Substances)
Stockholm Convention (Persistent Organic Pollutants)

Full text of other abbreviations

Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Repr.	:	Reproductive toxicity
RU OEL	:	SanPiN 1.2.3685-21 Table 2.1, Table 2.8, Table 2.16 & Table 2.17 Maximum permissible concentrations (MPC) in the air of the working area
RU OEL / MPC-STEL	:	Maximum Permissible Concentration - Short Term Exposure
List 2	:	SanPiN 1.2.3685-21 Table 1.2, Table 1.12 & Table 1.13 Tentative Safe Exposure Levels (TSEL) in the air of urban and rural settlements
List 4	:	SanPiN 1.2.3685-21 Table 3.13, Table 3.15, Table 3.16 & Table 3.17 Maximum permissible concentrations (MPC) of chemicals in the water of drinking systems of centralized, including hot, and non-centralized water supply, water of underground and surface water bodies of domestic drinking and cultural and domestic water use, water of swimming pools, water parks

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by



OKS 352

Version	Revision Date:	Date of last issue: 08.09.2021	Print Date:
1.5	24.01.2023	Date of first issue: 14.07.2014	24.01.2023

Road; AIIC - Australian Inventory of Industrial Chemicals; 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; 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; TCSI - Taiwan Chemical Substance Inventory; TECl - 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

This safety data sheet applies only to products as originally packed and labelled. The information contained therein may not be reproduced or modified without our express written permission. Any forwarding of this document is only permitted to the extent required by law. Any further, in particular public, dissemination of the safety data sheet (e.g. as a document for download from the Internet) is not permitted without our express written consent. We provide our customers with amended safety data sheets as prescribed by law. The customer is responsible for passing on safety data sheets and any amendments contained therein to its own customers, employees and other users of the product. We provide no guarantee that safety data sheets received by users from third parties are up-to-date. All information and instructions in this safety data sheet have been compiled to the best of our knowledge and are based on the information available to us on the day of publication. The information provided is intended to describe the product in relation to the required safety measures; it is neither an assurance of characteristics nor a guarantee of the product's suitability for particular applications and does not justify any contractual legal relationship. The existence of a safety data sheet for a particular jurisdiction does not necessarily mean that import or use within that jurisdiction is legally permitted. If you have any questions, please contact your responsible sales contact or authorized trading partner.