

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX[®] 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

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

1.1 Product identifier

Trade name : NOROX[®] 600

REACH Registration Number : 01-2119966122-42-0002

Substance name : Di(4-tert-butylcyclohexyl) peroxydicarbonate

EC-No. : 239-557-1

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

Use of the Substance/Mixture : polymerisation initiators

1.3 Details of the supplier of the safety data sheet

Company : United Initiators GmbH
Dr.-Gustav-Adolph-Str. 3
82049 Pullach

Telephone : +49 / 89 / 74422 – 0

E-mail address of person responsible for the SDS : contact@united-in.com

1.4 Emergency telephone number

0800 000 7801 (toll-free, access from Germany only) +49 89 220 61012

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Organic peroxides, Type C	H242: Heating may cause a fire.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Long-term (chronic) aquatic hazard, Category 3	H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX[®] 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

Hazard pictograms

:



Signal word

:

Danger

Hazard statements

:

H242 Heating may cause a fire.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

:

Prevention:

P220 Keep/Store away from clothing/ strong acids, bases, heavy metal salts and other reducing substances /combustible materials.
P233 Keep container tightly closed.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

Storage:

P411 Store at temperatures not exceeding 30 °C.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name : Di(4-tert-butylcyclohexyl) peroxydicarbonate

EC-No. : 239-557-1

Chemical nature : Organic Peroxides, Solid

Components

Chemical name	CAS-No. EC-No.	Concentration (%) w/w)	M-Factor, SCL, ATE
Di(4-tert-butylcyclohexyl) peroxydicarbonate	15520-11-3 239-557-1	<= 100	

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
Symptoms of poisoning may appear several hours later.
Call a physician immediately.

Protection of first-aiders : First Aid responders should pay attention to self-protection
and use the recommended protective clothing

If inhaled : If unconscious, place in recovery position and seek medical
advice.
If symptoms persist, call a physician.
If breathed in, move person into fresh air.

In case of skin contact : In case of contact, immediately flush skin with plenty of water
for at least 15 minutes while removing contaminated clothing
and shoes.
Wash contaminated clothing before re-use.
If on skin, rinse well with water.
If on clothes, remove clothes.
If symptoms persist, call a physician.

In case of eye contact : In the case of contact with eyes, rinse immediately with plenty
of water and seek medical advice.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

If swallowed : Keep respiratory tract clear.
Call a physician immediately.
Rinse mouth thoroughly with water.

4.2 Most important symptoms and effects, both acute and delayed

Risks : May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray jet
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Contact with incompatible materials or exposure to temperatures exceeding SADT may result in a self-accelerating decomposition reaction with release of flammable vapors which may auto-ignite.
The product burns violently.
Flash back possible over considerable distance.
Vapours may form explosive mixtures with air.
The product will float on water and can be reignited on surface water.
Cool closed containers exposed to fire with water spray.

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

Specific extinguishing methods : Do not use a solid water stream as it may scatter and spread fire.
Remove undamaged containers from fire area if it is safe to do so.
Use water spray to cool unopened containers.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Avoid dust formation.
Avoid breathing dust.
Remove all sources of ignition.
Follow safe handling advice and personal protective equipment recommendations.
Never return spills in original containers for re-use.
Treat recovered material as described in the section "Disposal considerations".

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
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 : Contact with incompatible substances can cause decomposition at or below SADT.
Clear spills immediately.
Suppress (knock down) gases/vapours/mists with a water spray jet.
To clean the floor and all objects contaminated by this material, use plenty of water.
Soak up with inert absorbent material.
Isolate waste and do not reuse.
Non-sparking tools should be used.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Advice on safe handling : Do not swallow.
Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
Take precautionary measures against static discharges.
Never return any product to the container from which it was originally removed.
Provide sufficient air exchange and/or exhaust in work rooms.
Avoid confinement.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Smoking, eating and drinking should be prohibited in the application area.
Wash thoroughly after handling.
For personal protection see section 8.
Persons susceptible to 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.
Protect from contamination.
- Advice on protection against fire and explosion : Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from heat and sources of ignition. Use only explosion-proof equipment. Keep away from combustible material.
- Hygiene measures : Keep away from food and drink. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Avoid impurities (e.g. rust, dust, ash), risk of decomposition. Electrical installations / working materials must comply with the technological safety standards. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Store in accordance with the particular national regulations.
- Advice on common storage : Keep away from strong acids, bases, heavy metal salts and other reducing substances.
- Storage class (TRGS 510) : 5.2, Organic peroxides and self-reacting hazardous materials
- Recommended storage temperature : < 20 °C

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

Further information on storage stability : No decomposition if stored normally.

7.3 Specific end use(s)

Specific use(s) : For further information, refer to the product technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Di(4-tert-butylcyclohexyl) peroxydicarbonate	Workers	Inhalation	Long-term systemic effects	5,87 mg/m3
	Workers	Skin contact	Long-term systemic effects	16,67 mg/kg bw/day

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

Substance name	Environmental Compartment	Value
Di(4-tert-butylcyclohexyl) peroxydicarbonate	Fresh water	0,39 mg/l
	Marine water	0,039 mg/l
	Intermittent use/release	0,39 mg/l
	Fresh water sediment	4685 mg/kg
	Marine sediment	468,5 mg/kg
	Soil	936,8 mg/kg
	Sewage treatment plant	2 mg/l

8.2 Exposure controls

Engineering measures

Minimize workplace exposure concentrations.

Personal protective equipment

Eye protection : Tightly fitting safety goggles
Please wear suitable protective goggles. Also wear face protection if there is a splash hazard.
Ensure that eyewash stations and safety showers are close to the workstation location.
Please follow all applicable local/national requirements when selecting protective measures for a specific workplace.

Equipment should conform to EN 166

Hand protection

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

Material : butyl-rubber
Break through time : 480 min
Glove thickness : 0,47 mm
Directive : Equipment should conform to EN 374

Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0,40 mm
Directive : Equipment should conform to EN 374

Remarks : The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove. Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.
Wear as appropriate:
Flame retardant antistatic protective clothing.

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.
Respirator with combination filter for vapour/particulate (EN 141)

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : powder

Colour : white

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

Odour	:	characteristic
Odour Threshold	:	No data available
Melting point/range	:	82 °C Decomposition: Decomposes below the melting point.
Boiling point/boiling range	:	Not applicable
Flammability	:	Organic peroxide
Upper explosion limit / Upper flammability limit	:	Upper explosion limit No data available
Lower explosion limit / Lower flammability limit	:	Lower explosion limit No data available
Flash point	:	Not applicable
Auto-ignition temperature	:	not determined
Self-Accelerating decomposition temperature (SADT)	:	45 °C Method: UN-Test H.4 SADT-Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction.
pH	:	substance/mixture is non-soluble (in water)
Viscosity		
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable
Solubility(ies)		
Water solubility	:	0,0056 g/l (5 °C) insoluble
Partition coefficient: n-octanol/water	:	log Pow: 8,34 The value is calculated
Dispersion Stability	:	No data available
Vapour pressure	:	> 0,00001 hPa (20 °C)
Relative density	:	not determined
Density	:	not determined
Bulk density	:	500 kg/m ³ (20 °C)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

Relative vapour density	:	Not applicable
Particle characteristics		
Particle size	:	not determined
Particle Size Distribution	:	No data available
Dustiness	:	Avoid dust formation.
Shape	:	not determined
Crystallinity	:	Not applicable
Surface treatment /Coatings	:	Not applicable

9.2 Other information

Explosives	:	Not explosive Avoid dust formation.
Oxidizing properties	:	The substance or mixture is not classified as oxidizing. Organic peroxide
Self-ignition	:	The substance or mixture is not classified as pyrophoric.
Self-heating substances	:	The substance or mixture is not classified as self heating.
Substances and mixtures, which in contact with water, emit flammable gases	:	The substance or mixture does not emit flammable gases in contact with water.
Desensitised explosives	:	Not applicable
Evaporation rate	:	Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	Dust may form explosive mixture in air.
---------------------	---	---

10.4 Conditions to avoid

Conditions to avoid	:	Protect from contamination.
---------------------	---	-----------------------------

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

Contact with incompatible substances can cause decomposition at or below SADT.
Heat, flames and sparks.
Avoid confinement.

10.5 Incompatible materials

Materials to avoid : Accelerators, strong acids and bases, heavy metals and heavy metal salts, reducing agents

10.6 Hazardous decomposition products

Irritant, caustic, flammable, noxious/toxic gases and vapours can develop in the case of fire and decomposition

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401
Assessment: The component/mixture is minimally toxic after single ingestion.

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Components:

Di(4-tert-butylcyclohexyl) peroxydicarbonate:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401
Assessment: The component/mixture is minimally toxic after single ingestion.

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Skin corrosion/irritation

Not classified based on available information.

Product:

Species : Rabbit
Method : OECD Test Guideline 404

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

Result : No skin irritation

Remarks : May cause skin irritation in susceptible persons.

Components:

Di(4-tert-butylcyclohexyl) peroxydicarbonate:

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

Serious eye damage/eye irritation

Not classified based on available information.

Product:

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

Remarks : Product dust may be irritating to eyes, skin and respiratory system.

Components:

Di(4-tert-butylcyclohexyl) peroxydicarbonate:

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

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Product:

Species	: Mouse
Method	: OECD Test Guideline 429
Result	: May cause sensitisation by skin contact.

Remarks : Causes sensitisation.

Components:

Di(4-tert-butylcyclohexyl) peroxydicarbonate:

Species	: Mouse
Method	: OECD Test Guideline 429

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX[®] 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

Result : May cause sensitisation by skin contact.

Germ cell mutagenicity

Not classified based on available information.

Product:

Genotoxicity in vitro : Method: OECD Test Guideline 471
Result: negative

Method: OECD Test Guideline 476
Result: negative

Method: OECD Test Guideline 487
Result: negative

Genotoxicity in vivo : Remarks: No data available

Components:

Di(4-tert-butylcyclohexyl) peroxydicarbonate:

Genotoxicity in vitro : Method: OECD Test Guideline 471
Result: negative

Method: OECD Test Guideline 476
Result: negative

Method: OECD Test Guideline 487
Result: negative

Genotoxicity in vivo : Remarks: No data available

Carcinogenicity

Not classified based on available information.

Product:

Remarks : This information is not available.

Components:

Di(4-tert-butylcyclohexyl) peroxydicarbonate:

Remarks : This information is not available.

Reproductive toxicity

Not classified based on available information.

Components:

Di(4-tert-butylcyclohexyl) peroxydicarbonate:

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX[®] 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

Effects on fertility : Remarks: This information is not available.

Effects on foetal development : Remarks: This information is not available.

STOT - single exposure

Not classified based on available information.

Product:

Remarks : No data available

Components:

Di(4-tert-butylcyclohexyl) peroxydicarbonate:

Remarks : No data available

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

Product:

Species	: Rat
NOAEL	: 500 mg/kg
LOAEL	: 1.000 mg/kg
Application Route	: Oral
Exposure time	: 28 d
Method	: OECD Test Guideline 407

Components:

Di(4-tert-butylcyclohexyl) peroxydicarbonate:

Species	: Rat
NOAEL	: 500 mg/kg
LOAEL	: 1.000 mg/kg
Application Route	: Oral
Exposure time	: 28 d
Method	: OECD Test Guideline 407

Aspiration toxicity

Not classified based on available information.

Product:

No data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

Components:

Di(4-tert-butylcyclohexyl) peroxydicarbonate:

No data available

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : 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.

Further information

Product:

Remarks : No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 704 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 42 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): 39 mg/l Exposure time: 72 h Method: OECD Test Guideline 201

Components:

Di(4-tert-butylcyclohexyl) peroxydicarbonate:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 704 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 42 mg/l Exposure time: 48 h Method: OECD Test Guideline 202

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 39 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

12.2 Persistence and degradability

Product:

Biodegradability : Result: Not readily biodegradable.
Method: OECD Test Guideline 301B

Components:

Di(4-tert-butylcyclohexyl) peroxydicarbonate:

Biodegradability : Result: Not readily biodegradable.
Method: OECD Test Guideline 301B

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Bioconcentration factor (BCF): 2.926

Components:

Di(4-tert-butylcyclohexyl) peroxydicarbonate:

Bioaccumulation : Bioconcentration factor (BCF): 2.926

Partition coefficient: n-octanol/water : log Pow: 8,34
Remarks: Calculation

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : 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.

12.6 Endocrine disrupting properties

Product:

Assessment : 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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX[®] 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful 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 contaminate ponds, waterways or ditches with chemical or used container.
Dispose of wastes in an approved waste disposal facility.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.
Dispose of in accordance with local regulations.

SECTION 14: Transport information

14.1 UN number or ID number

ADN	: UN 3114
ADR	: UN 3114
RID	: UN 3114 Not permitted for transport
IMDG	: UN 3114
IATA	: UN 3114 Not permitted for transport

14.2 UN proper shipping name

ADN	: ORGANIC PEROXIDE TYPE C, SOLID, TEMPERATURE CONTROLLED (DI-(4-tert-BUTYLCYCLOHEXYL)PEROXYDICARBONATE)
ADR	: ORGANIC PEROXIDE TYPE C, SOLID, TEMPERATURE CONTROLLED (DI-(4-tert-BUTYLCYCLOHEXYL)PEROXYDICARBONATE)
RID	: ORGANIC PEROXIDE TYPE C, SOLID, TEMPERATURE

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

IMDG : CONTROLLED
Not permitted for transport
: ORGANIC PEROXIDE TYPE C, SOLID, TEMPERATURE
CONTROLLED
(DI-(4-tert-BUTYLCYCLOHEXYL)PEROXYDICARBONATE)

IATA : ORGANIC PEROXIDE TYPE C, SOLID, TEMPERATURE
CONTROLLED
Not permitted for transport

14.3 Transport hazard class(es)

ADN : 5.2
ADR : 5.2
RID : Not permitted for transport
IMDG : 5.2
IATA : Not permitted for transport

14.4 Packing group

ADN
Packing group : Not assigned by regulation
Classification Code : P2
Labels : 5.2

ADR
Packing group : Not assigned by regulation
Classification Code : P2
Labels : 5.2
Tunnel restriction code : (D)

RID : Not permitted for transport

IMDG
Packing group : Not assigned by regulation
Labels : 5.2
EmS Code : F-F, S-R

IATA (Cargo) : Not permitted for transport
IATA (Passenger) : Not permitted for transport

14.5 Environmental hazards

ADN
Environmentally hazardous : no

ADR
Environmentally hazardous : no

RID : Not permitted for transport

IMDG
Marine pollutant : no

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

14.6 Special precautions for user

Additional advice

Temperature controlled transport.:
Control temperature : 30 °C
Emergency temperature : 35 °C

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

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 the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

P6b	SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES	Quantity 1 50 t	Quantity 2 200 t
-----	--	--------------------	---------------------

Water hazard class (Germa- : WGK 1 slightly hazardous to water

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

ny)

Code Number: 1.493

Classification according to AwSV, Annex 1 (4) (German regulatory requirements)

Other regulations:

Gefahrgruppe nach DGUV 13 Vorschrift 13 (bisher BGV B4): Ia (German regulatory requirements)

The product is subject to the supply restrictions of the Ordinance on the Prohibition of Chemicals.

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The components of this product are reported in the following inventories:

TCSI (TW)	: On the inventory, or in compliance with the inventory
TSCA (US)	: All substances listed as active on the TSCA inventory
AIIC (AU)	: On the inventory, or in compliance with the inventory
DSL (CA)	: All components of this product are on the Canadian DSL
ENCS (JP)	: On the inventory, or in compliance with the inventory
ISHL (JP)	: On the inventory, or in compliance with the inventory
KECI (KR)	: On the inventory, or in compliance with the inventory
PICCS (PH)	: On the inventory, or in compliance with the inventory
IECSC (CN)	: On the inventory, or in compliance with the inventory
NZIoC (NZ)	: On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.
For further information see eSDS.

SECTION 16: Other information

Full text of other abbreviations

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

NOROX® 600



Version	Revision Date:	SDS Number:	Date of last issue: 23.08.2022
1.5	09.03.2023	600000000181	Date of first issue: 09.08.2016

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; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information : This safety datasheet only contains information relating to safety and does not replace any product information or product specification.
These safety instructions also apply to empty packaging which may still contain product residues.

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

DE / EN