

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.12.2022

Revision: 28.11.2022

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

- **Product identifier**
- **Trade name:** isononanoic acid
- **Article number:** 1069
- **CAS Number:**
3302-10-1
- **EC number:**
221-975-0
- **Registration number** 01-2119517580-45
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Chemical.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Möller Chemie GmbH & Co. KG
Bürgerkamp 1
D-48565 Steinfurt
Tel.: 02551/9340-0
Fax: 02551/9340-60
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**
Poison Control Center Mainz - 24 hour emergency service - Tel.: +49 (0) 6131/19240

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05 GHS07

- **Signal word** Danger
- **Hazard statements**
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
- **Precautionary statements**
P305+P351+P338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.

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P321	Specific treatment (see on this label).
P330	Rinse mouth.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Other hazards**

The product does not contain any substance above the legal limits included on the list for endocrine disrupting properties established under Article 59(1) of Regulation (EC) No 1907/2006 or under Commission Delegated Regulation (EU) 2017/2100 or of Commission Regulation (EU) 2018/605 has endocrine disrupting properties.

- **Results of PBT and vPvB assessment**

- **PBT:**

The product does not contain any substances above legal limits that meet the criteria for PBT (persistent, bioaccumulative and toxic).

- **vPvB:**

The product does not contain any substances above legal limits that meet the criteria for vPvB (very persistent and very bioaccumulative).

3 Composition/information on ingredients

- **Chemical characterisation: Substances**

- **CAS No. Description**

3302-10-1 isononanoic acid

- **Identification number(s)**

- **EC number:** 221-975-0

- **Additional information:**

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

3,5,5-trimethylhexanoic acid

Content (W/W): $\geq 95\%$ - $\leq 99\%$ Acute Tox. 4 (orally)

CAS number: 3302-10-1 Skin Corr./Irrit. 2

EC number: 221-975-0 Eye Dam./Irrit. 1 H318, H315, H302

isononanoic acid

Content (W/W): $\geq 1\%$ - $\leq 5\%$ Acute Tox. 4 (orally)

CAS Number: 26896-18-4 Eye Dam./Irrit. 1

EC number: 248-092-3 H318, H302

isononyl alcohol

Content (W/W): $\geq 0\%$ - $\leq 0.1\%$ Skin Corr./Irrit. 2

CAS Number: 27458-94-2 Eye Dam./Irrit. 1

EC number: 248-471-3 H318, H302

3,5,5-trimethylhexanal

Content (W/W): $\geq 0\%$ - $\leq 0.1\%$ Flam. Liquid 3

CAS Number: 5435-64-3 Skin Corr./Irrit. 2

EC number: 226-603-0 Skin Sens. 1, H226, H315, H317

4 First aid measures

- **Description of first aid measures**

- **General information:** Immediately remove any clothing soiled by the product.

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:**

Rinse out mouth and then drink plenty of water.

If symptoms persist consult doctor.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fire with alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Nitrogen oxides, carbon oxides
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Avoid contact with eyes and skin
Avoid inhalation.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust).
Dispose contaminated material as waste according to item 13.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Avoid contact with skin, eyes and clothing.
Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Suitable materials for containers: high-density polyethylene (HDPE), low-density polyethylene (LDPE), glass, stove enamel RDL 50, stainless steel 1.4301 (V2), stainless steel 1.4541, stainless steel 1.4401 (V4), stainless steel 1.4571
Unsuitable materials for containers: galvanized carbon steel (zinc), paper/cardboard, carbon steel (iron), aluminium
- **Information about storage in one common storage facility:**
Do not store together with alkalis (caustic solutions).
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in a dry, cool and well-ventilated place.
- **Storage class:** 10
- **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:** Not required.

· **DNELs**

worker:

Long-term exposure - systemic effects, inhalation: 4.4 mg/m³

worker:

Long-term exposure - systemic effects, dermal: 1.25 mg/kg

Consumer:

Long term and short term exposure - local effects, inhalation: 5 mg/m³

Consumer:

Long-term exposure - systemic effects, dermal: 0.6 mg/m³

worker:

Long-term and short-term exposure - local effects, inhalation: 10 mg/m³

Consumer:

Long-term exposure - systemic effects, inhalation: 1.1 mg/m³

Consumer:

Long-term exposure - systemic effects, oral: 0.6 mg/m³

· **PNECs**

Fresh water: 0.068 mg/l

Sea water: 0.0068 mg/l

sporadic release: 1.36 mg/l

Sediment (fresh water): 1.08 mg/kg

Sediment (seawater): 0.108 mg/kg

Soil: 0.176 mg/kg

Sewage treatment plant: 23 mg/l

· **Additional information:** The lists valid during the making were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from food, drink and animal feed.

Take off contaminated, soaked clothing immediately.

Wash hands before breaks and at the end of work.

Avoid contact with eyes.

Avoid contact with eyes and skin.

Do not eat, drink, smoke or sniff while working.

· **Respiratory protection:** Suitable respiratory protective device recommended.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Nitrile rubber, NBR

PVC gloves

Butyl rubber, BR

Chloroprene rubber, CR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **Eye protection:**

Tightly sealed goggles

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· Form:	Fluid
· Colour:	Colourless
· Odour:	Mild
· Odour threshold:	Not determined.

· **pH-value at 20 °C:** 3.5 (0,2 %(m))· **Change in condition**

· Melting point/freezing point:	<-60 °C
· Initial boiling point and boiling range:	230 - 240 °C (1.013 hPa)

· **Flash point:** 137 °C (DIN 51758)· **Flammability (solid, gas):** Not applicable.· **Ignition temperature:** 320 °C (Bibliografia)· **Decomposition temperature:** Not determined.· **Auto-ignition temperature:** Not determined.· **Explosive properties:** Product does not present an explosion hazard.· **Explosion limits:**

· Lower:	Not determined.
· Upper:	Not determined.

· **Vapour pressure at 20 °C:** 0.0058 hPa· **Density at 20 °C:** 0.9 g/cm³· **Relative density** Not determined.· **Vapour density** Not determined.· **Evaporation rate** Not determined.· **Solubility in / Miscibility with water:**

Insoluble.

· **Partition coefficient: n-octanol/water at 25 °C:** 3.34 log KOW (calculated)· **Viscosity:**

· Dynamic at 20 °C:	11.47 mPas (ASTM D 445-97)
· Kinematic:	Not determined.

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity** No dangerous reactions known under normal conditions.· **Chemical stability**· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

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- **Possibility of hazardous reactions**
Reacts with strong alkali.
Exothermic reaction.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** Strong bases
- **Hazardous decomposition products:**
Carbon monoxide
Nitrogen oxides (NO_x)

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
Harmful if swallowed.
- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
The product does not contain any substance above the legal limits included on the list for endocrine disrupting properties established under Article 59(1) of Regulation (EC) No 1907/2006 or under Commission Delegated Regulation (EU) 2017/2100 or of Commission Regulation (EU) 2018/605 has endocrine disrupting properties.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:**
LC50/96 h: 122 mg/l (*Oncorhynchus mykiss*)
EC50/48 h: 68 mg/l (*Daphnia magna*)
EC50/72 h: 81 mg/l (*Pseudokirchneriella subcapitata*)
- **Persistence and degradability** Easily biodegradable
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
- **vPvB:** This substance is not considered to be very persistent nor very bioaccumulative (vPvB).
- **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Disposal according to local regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|--|-----------------|
| · UN-Number
· ADR, ADN, IMDG, IATA | Void |
| · UN proper shipping name
· ADR, ADN, IMDG, IATA | Void |
| · Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | Void |
| · Packing group
· ADR, IMDG, IATA | Void |
| · Environmental hazards:
· Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| · UN "Model Regulation": | Void |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Directive 2012/18/EU**
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
Substance is not listed.
- **Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Product safety department
- **Contact:** Mrs. Steyer
- **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)

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*PNEC: Predicted No-Effect Concentration (REACH)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 4: Acute toxicity – Category 4**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Dam. 1: Serious eye damage/eye irritation – Category 1*

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