Trade name: 1K-Nano
Product no.: 245999
Current version : 1.0.0, issued: 28.08.2020 **Replaced version:** -, issued: - **Region:** MT

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

1.1 Product identifier

Trade name

1K-Nano

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

Relevant identified uses of the substance or mixture
sealing

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
Koch-Chemie GmbH
Einsteinstr. 42
D-59423 Unna

Telephone no. +49-2303-9 86 70-0
Fax no. +49-2303-9 86 70-26

1.4 Emergency telephone number

No data available.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Flam. Liq. 2; H225
Asp. Tox. 1; H304
STOT SE 3; H336
Aquatic Chronic 2; H411

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms

GHS02 GHS07 GHS08 GHS09

Signal word
Danger

Hazardous component(s) to be indicated on label:
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics

Hazard statement(s)
H225 Highly flammable liquid and vapour.

H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Hazard statements (EU)

EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statement(s)

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P312	Call a POISON CENTER/doctor if you feel unwell.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container to a facility in accordance with local and national regulations.

2.3 Other hazards

PBT assessment
According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.

vPvB assessment
According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**			
	- 920-750-0 - 01-2119473851-33	Asp. Tox. 1; H304 Aquatic Chronic 2; H411 Flam. Liq. 2; H225 STOT SE 3; H336	>= 25,00 - < 50,00	%-b.w.
2	**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics**			
	- 927-241-2 - 01-2119471843-32	Aquatic Chronic 3; H412 Asp. Tox. 1; H304 Flam. Liq. 3; H226 STOT SE 3; H336 EUH066	>= 25,00 - < 50,00	%-b.w.
3	**siloxanes and silicones, di-Me, polymers with mesilsesquioxanes, (2-amino-1-methylethoxy)-terminated**			

	201167-67-1 620-329-9 - -	Skin Irrit. 2; H315 Eye Irrit. 2; H319	< 2,50	%-b.w.

Full Text for all H-phrases and EUH-phrases: pls. see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician.

After inhalation
Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air.

After skin contact
In case of contact with skin wash off with water.

After eye contact
Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes).

After ingestion
Rinse mouth thoroughly with water. Do not induce vomiting - aspiration hazard. Never give anything by mouth to an unconscious person. Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Effects
In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water spray jet; Alcohol-resistant foam; Carbon dioxide; Dry chemical extinguisher

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO2); Vapours are heavier than air and may spread near ground to sources of ignition. May travel considerable distance to source of ignition and flash back.

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear full protective suit. Containers close to fire should be transferred to a safe place. Cool closed containers exposed to fire with water. Run-off water from fire fighting must not be discharged into drains or enter surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Refer to protective measures listed in sections 7 and 8. Keep away from ignition sources.

For emergency responders

Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions
Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. In case of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up
Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections
Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures
Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale vapours. Avoid contact with eyes and skin. Wash hands before breaks and after work. Remove contaminated clothing and shoes and launder thoroughly before reusing.

Advice on protection against fire and explosion
Vapours can form an explosive mixture with air. Isolate from sources of heat, sparks and open flame. Take precautionary measures against electrostatic loading (earthing necessary during loading operations). Use explosion-proof equipment/fittings and non-sparking tools.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
Keep container tightly closed and dry in a cool, well-ventilated place.

Requirements for storage rooms and vessels
Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products
Substances to be avoided, see section 10.

7.3 Specific end use(s)
No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**			**- 920-750-0**	
	dermal	Long term (chronic)	systemic	773	mg/kg/day
	inhalative	Long term (chronic)	systemic	2035	mg/m³
2	**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics**			**- 927-241-2**	
	dermal	Long term (chronic)	systemic	208	mg/kg/day

	inhalative	Long term (chronic)	systemic	871	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**			**- 920-750-0**	
	oral	Long term (chronic)	systemic	699	mg/kg/day
	dermal	Long term (chronic)	systemic	699	mg/kg/day
	inhalative	Long term (chronic)	systemic	608	mg/m³
2	**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics**			**- 927-241-2**	
	oral	Long term (chronic)	systemic	125	mg/kg/day
	dermal	Long term (chronic)	systemic	125	mg/kg/day
	inhalative	Long term (chronic)	systemic	185	mg/m³

8.2 Exposure controls

Appropriate engineering controls
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified. Filter A or environment-independent breathing apparatus.

Eye / face protection
Tightly fitting safety glasses (EN 166).

Hand protection
Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material	nitrile		
Material thickness		0,4	mm
Breakthrough time	>	480	min
Appropriate Material	viton		
Material thickness	>	0,7	mm

Other
Chemical-resistant work clothes.

Environmental exposure controls
No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form/Colour
liquid
cloudy

Odour
solvent-like

Odour threshold
No data available

pH value
No data available

Boiling point / boiling range
No data available

Melting point / melting range
No data available

Decomposition point / decomposition range
No data available

Flash point				
Value	>	1	°C

Auto-ignition temperature
No data available

Oxidising properties
No data available

Explosive properties
No data available

Flammability (solid, gas)
No data available

Lower flammability or explosive limits
No data available

Upper flammability or explosive limits
No data available

Vapour pressure
No data available

Vapour density
No data available

Evaporation rate
No data available

Relative density
No data available

Density					
Value	0,76	-	0,78	g/cm³
Reference temperature			20	°C

Solubility in water	
Comments	immiscible

Solubility(ies)
No data available

Partition coefficient: n-octanol/water
No data available

Viscosity				
Value	<	7	mm²/s
Reference temperature		40	°C
Type	kinematic		

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available.

10.2 Chemical stability
Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions
Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid
Heat, naked flames and other ignition sources. Static discharges.

10.5 Incompatible materials
strong oxidizing agents

10.6 Hazardous decomposition products
None, if handled according to intended use.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity					
No	**Substance name**		**CAS no.**		**EC no.**
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**		**-**		**920-750-0**
LD50	>		5840		mg/kg bodyweight
Species	rat				
Source	ECHA				

Acute dermal toxicity						
No	**Substance name**			**CAS no.**		**EC no.**
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**			**-**		**920-750-0**
LD50	>	2800	-	3100		mg/kg bodyweight
Species	rat					
Source	ECHA					

Acute inhalational toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**	**-**		**920-750-0**
LC50	>	23,3		mg/l
Duration of exposure		4		h
State of aggregation	Vapour			
Species	rat			
Source	ECHA			

Skin corrosion/irritation				
No	**Substance name**	**CAS no.**		**EC no.**
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**	**-**		**920-750-0**
Species	rabbit			
Method	OECD 404			
Source	ECHA			
Evaluation	non-irritant			

Serious eye damage/irritation

No	Substance name	CAS no.	EC no.
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**	-	920-750-0

Species	rabbit
Source	ECHA
Evaluation	non-irritant

Respiratory or skin sensitisation

No	Substance name	CAS no.	EC no.
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**	-	920-750-0

Route of exposure	Skin
Species	guinea pig
Source	ECHA
Evaluation	non-sensitizing

Germ cell mutagenicity

No	Substance name	CAS no.	EC no.
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**	-	920-750-0

Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

Reproduction toxicity

No	Substance name	CAS no.	EC no.
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**	-	920-750-0

Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

Carcinogenicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No	Substance name	CAS no.	EC no.
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**	-	920-750-0

Route of exposure	inhalational
Species	rat
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

Aspiration hazard

No data available

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)

No	Substance name	CAS no.	EC no.
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**	-	920-750-0

LL50	3	-	10	mg/l
Duration of exposure			96	h
Species	Oncorhynchus mykiss			
Method	OECD 203			
Source	ECHA			

Toxicity to fish (chronic)					
No	**Substance name**		**CAS no.**		**EC no.**
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**		**-**		**920-750-0**
NOELR			0,57		mg/l
Duration of exposure			28		day(s)
Species	Oncorhynchus mykiss				
Method	(Q)SAR				
Source	ECHA				

Toxicity to Daphnia (acute)					
No	**Substance name**		**CAS no.**		**EC no.**
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**		**-**		**920-750-0**
EL50		4,6	-	10	mg/l
Duration of exposure				48	h
Species	Daphnia magna				
Method	OECD 202				
Source	ECHA				
2	**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics**		**-**		**927-241-2**
EL50		> 22	-	46	mg/l
Duration of exposure				48	h
Species	Daphnia magna				
Method	OECD 202				
Source	ECHA				

Toxicity to Daphnia (chronic)					
No	**Substance name**		**CAS no.**		**EC no.**
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**		**-**		**920-750-0**
NOELR		1	-	1,6	mg/l
Duration of exposure				21	day(s)
Species	Daphnia magna				
Method	OECD 211				
Source	ECHA				

Toxicity to algae (acute)					
No	**Substance name**		**CAS no.**		**EC no.**
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**		**-**		**920-750-0**
EL50		10	-	30	mg/l
Duration of exposure				72	h
Species	Pseudokirchneriella subcapitata				
Method	OECD 201				
Source	ECHA				

Toxicity to algae (chronic)					
No	**Substance name**		**CAS no.**		**EC no.**
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**		**-**		**920-750-0**
NOELR			6,3		mg/l
Duration of exposure			3		day(s)
Species	Pseudokirchneriella subcapitata				
Method	OECD 201				
Source	ECHA				

Bacteria toxicity
No data available

12.2 Persistence and degradability

Biodegradability				
No	**Substance name**	**CAS no.**	**EC no.**	
1	**Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics**	**-**	**920-750-0**	
Type	aerobic biodegradation			
Value		98	%	
Duration		28	day(s)	
Method	OECD 301 F			
Source	ECHA			
Evaluation	readily biodegradable			
2	**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics**	**-**	**927-241-2**	
Type	aerobic biodegradation			
Value		89	%	
Duration		28	day(s)	
Method	OECD 301 F			
Source	ECHA			
Evaluation	readily biodegradable			

12.3 Bioaccumulative potential
No data available.

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.
vPvB assessment	According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

12.6 Other adverse effects
No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.
Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging
Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

Class	3
Classification code	F1
Packing group	II
Hazard identification no.	33
UN number	UN1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Technical name	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics
Special Provision 640	640D
Tunnel restriction code	D/E
Label	3
Environmentally hazardous substance mark	Symbol "fish and tree"

14.2 Transport IMDG

Class	3
Packing group	II
UN number	UN1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Technical name	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics
EmS	F-E, S-E
Label	3
Marine pollutant mark	Symbol "fish and tree"

14.3 Transport ICAO-TI / IATA

Class	3
Packing group	II
UN number	UN1993
Proper shipping name	Flammable liquid, n.o.s.
Technical name	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics
Label	3

14.4 Other information
No data available.

14.5 Environmental hazards
Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user
No data available.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES	
The product is considered being subject to REACH regulation (EC) 1907/2006 annexe XVII.	No 3, 40

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances	
This product is subject to Part I of Annex I, risk category:	E2, P5b
If the properties of the substance/product give rise to more than one classification, for the purposes of 2012/18/UE, the lowest qualifying quantities set out in Part 1 and Part 2 of Annex I shall apply.	

Other regulations
Adhere to the national sanitary and occupational safety regulations when using this product. Employment restrictions, according to the regulations for protection of expectant and nursing mothers and the youth health and safety regulations, serving to protect against hazardous materials, should be observed.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

Creation of the safety data sheet
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This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

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