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

1.1 Product identifier

Innotech 203 Isosol flüssig

IUPAC	Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics
EINECS/ELINCS	918-167-1
CAS	-

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

1.2.1 Relevant uses

Lubricant

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

innotech Vertriebs GmbH
Junkersstrasse 16
93055 Regensburg / GERMANY
Phone +49(0)941 70 08 78
Fax +49(0)941 70 46 60
Homepage www.innotech-r.de
E-mail info@innotech-r.de

Address enquiries to

Technical information	info@innotech-r.de
Safety Data Sheet	sdb@chemiebuero.de (No dispatch of safety data sheets)
	Safety data sheets are available from the supplier.

1.4 Emergency telephone number

Advisory body	Call NHS 111 or a doctor

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Asp. Tox. 1: H304 May be fatal if swallowed and enters airways.
Flam. Liq. 3: H226 Flammable liquid and vapour.
Aquatic Chronic 4: H413 May cause long lasting harmful effects to aquatic life.

2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

Hazard pictograms

Signal word	DANGER
Contains:	Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics EINECS: 918-167-1
Hazard statements	H304 May be fatal if swallowed and enters airways. H226 Flammable liquid and vapour. H413 May cause long lasting harmful effects to aquatic life.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER / doctor. P331 Do NOT induce vomiting. P501 Dispose of contents/container in accordance with local/national regulation.
Special labelling	EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

Environmental hazards Does not contain any PBT or vPvB substances.
Contains no ingredients with endocrine-disrupting properties.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

The product is a substance.

Range [%]	Substance
100	Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics
	CAS: -, EINECS/ELINCS: 918-167-1, Reg-No.: 01-2119472146-39-XXXX
	GHS/CLP: Asp. Tox. 1: H304 - Flam. Liq. 3: H226 - EUH066

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

3.2 Mixtures

not applicable

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Change soaked clothing immediately.

Inhalation Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact When in contact with the skin, clean with soap and water.
Consult a doctor if skin irritation persists.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion Rinse out mouth and give plenty of water to drink.
Do not induce vomiting.
Consult a doctor immediately.
Do not induce vomiting.
Beware of vomiting. Risk of aspiration.
Consult a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Shortness of breath
Irritant effects
Nausea, Emesis, Fever, Headache, Methaemoglobinaemia, Cyanosis

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
If swallowed or in the event of vomiting, risk of product entering the lungs.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Foam, dry powder, water spray jet, carbon dioxide.

Extinguishing media that must not be used Full water jet.

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Not combusted hydrocarbons.
Carbon monoxide (CO)

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Do not inhale explosion and/or combustion gases.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.
Cool containers at risk with water spray jet.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.
Ensure adequate ventilation.
Use personal protective equipment (protective gloves, safety glasses, protective clothing).

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.
In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, universal absorbent, diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide good room ventilation even at ground level (vapours are heavier than air).

Hot product gives off flammable vapours.
Keep away from open flames, hot surfaces and sources of ignition.
Take precautionary measures against static discharges.
Ignitable mixtures can be formed in the empty container.

Do not eat, drink or smoke when using this product.
Keep away from food and drink.
Wash hands before breaks and after work.
Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Prevent penetration into the ground.

Do not store together with oxidizing agents.
Do not store together with food and animal food/diet.

Keep container tightly closed.
Keep container in a well-ventilated place.
Protect from heat/overheating and from sun.
Keep in a cool place.
Keep away from frost.

7.3 Specific end use(s)

none

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

not relevant

DNEL

Substance
Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics, CAS: -
There are no DNEL values established for the substance.

PNEC

Substance
Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics, CAS: -
There are no PNEC values established for the substance.

8.2 Exposure controls

Additional advice on system design
Ensure adequate ventilation on workstation.
Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.

Eye protection
Tightly fitting goggles. (EN 166:2001)

Hand protection
The details concerned are recommendations. Please contact the glove supplier for further information.
0.4 mm Nitrile rubber, >480 min (EN 374-1/-2/-3).

Skin protection
Solvent-resistant protective clothing (EN 340)

Other
Avoid contact with eyes and skin.
Do not breathe vapour/spray.
Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.

Respiratory protection
In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.
Short term: filter apparatus, filter A. (DIN EN 14387)

Thermal hazards
not applicable

Delimitation and monitoring of the environmental exposition
Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Form	liquid
Color	colourless
Odor	solvent-like
Odour threshold	not determined
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	180 - 191 (DIN EN ISO 3405)
Flash point [°C]	57
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	0.5 Vol.%
Upper explosion limit	6.0 Vol.%
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	<0.1
Density [g/cm³]	0.759 (DIN EN ISO 12185)
Relative density	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	Slightly soluble
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	not determined
Kinematic viscosity	1.8 mm²/s (ASTM D7042)
Relative vapour density	>1
Evaporation speed	not determined
Melting point [°C]	not determined
Auto-ignition temperature [°C]	>200
Decomposition temperature [°C]	not determined
Particle characteristics	not applicable

9.2 Other information

Pour point: <-20 °C (ASTM D97)

SECTION 10: Stability and reactivity

10.1 Reactivity

Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.

10.2 Chemical stability

The product is stable under standard conditions.

10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents.

10.4 Conditions to avoid

No dangerous reactions known if used as directed.
Strong heating.
Electrostatic charging.

10.5 Incompatible materials

Strong oxidizing agent.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

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

Acute oral toxicity Based on available data, the classification criteria are not met.

Substance
Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics, CAS: -
LD50, oral, Rat, >5000 mg/kg

Acute dermal toxicity Based on available data, the classification criteria are not met.

Substance
Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics, CAS: -
LD50, dermal, Rabbit, 3.16 mL/kg bw
LD50, dermal, Rabbit, 2200 - 2500 mg/kg bw

Acute inhalational toxicity Based on available data, the classification criteria are not met.

Substance
Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics, CAS: -
LC50, inhalative, Rat, 4.951 - 9.3 mg/L air, 4h

Serious eye damage/irritation Based on available data, the classification criteria are not met.

Substance
Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics, CAS: -
Eye, Rabbit, OECD 405, non-irritating

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Substance
Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics, CAS: -
dermal, Rabbit, OECD 404, non-irritating

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Substance
Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics, CAS: -
dermal, Guinea pig, OECD 406, non-sensitizing

Specific target organ toxicity — single exposure Based on available data, the classification criteria are not met.

Specific target organ toxicity — repeated exposure Based on available data, the classification criteria are not met.

Substance
Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics, CAS: -
NOAEL, oral, Rat, >1000 mg/kg bw/day, negativ, systemic; subchronic,
NOAEC, inhalative, Rat, >10400 mg/m³, negativ, systemic; subchronic,

Mutagenicity Based on available data, the classification criteria are not met.

Substance
Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics, CAS: -
in vitro, OECD 479, negativ
in vitro, OECD 471, negativ

Reproduction toxicity Based on available data, the classification criteria are not met.

- Fertility No information available.

- Development

Substance
Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics, CAS: -
inhalative, Rat, OECD 414, no adverse effect observed

Carcinogenicity Based on available data, the classification criteria are not met.

Aspiration hazard May be fatal if swallowed and enters airways.
v < 20.5 mm²/s (40°C)

General remarks

Toxicological data of complete product are not available.

11.2 Information on other hazards

Endocrine disrupting properties Does not contain a relevant substance that meets the classification criteria.

Other information none

SECTION 12: Ecological information

12.1 Toxicity

Substance
Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics, CAS: -
EC50, (72h), Algae, 100 mg/L
EC50, (96h), fish, 76.8 g/L
EL50, (72h), Algae, 100 - 1000 mg/L
EL50, (21d), Invertebrates, 1 mg/L
NOEC, (21d), Invertebrates, 11 µg/L
NOEC, (48h), Invertebrates, 100 mg/L
NOELR, (21d), Invertebrates, 1 mg/L
NOELR, (72h), Algae, 100 - 1000 mg/L
LL50, (48h), Invertebrates, 1 g/L
LL50, (96h), fish, 3.6 - 1000 mg/L
LL50, (72h), fish, 1 g/L
LL50, (48h), fish, 1 g/L
LL50, (24h), fish, 1 g/L
LL50, (72h), Invertebrates, 1 g/L
LL50, (24h), Invertebrates, 1 g/L
LL50, (96h), Invertebrates, 1 g/L

12.2 Persistence and degradability

Behaviour in environment compartments No information available.

Behaviour in sewage plant No information available.

Biological degradability The product is only slightly biodegradable.
31 % / 28 d

12.3 Bioaccumulative potential

Accumulation in organisms is not expected.

12.4 Mobility in soil

Spillages may penetrate the soil causing ground water contamination.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

12.7 Other adverse effects

Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

	Dispose of as hazardous waste. Coordinate disposal with the disposal contractor/authorities if necessary.
Waste no. (recommended)	070104*

Contaminated packaging

	Contaminated packing should be disposed of as product waste. Uncontaminated packaging may be taken for recycling.
Waste no. (recommended)	150110* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID	3295
Inland navigation (ADN)	3295
Marine transport in accordance with IMDG	3295
Air transport in accordance with IATA	3295

14.2 UN proper shipping name

Transport by land according to ADR/RID	Hydrocarbons, liquid, n.o.s.
- Classification Code	F1
- Label	
- ADR LQ	5 l
- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 3 (E)
Inland navigation (ADN)	Hydrocarbons, liquid, n.o.s.
- Classification Code	F1
- Label	
Marine transport in accordance with IMDG	Hydrocarbons, liquid, n.o.s.
- EMS	F-E, S-D
- Label	
- IMDG LQ	5 l
Air transport in accordance with IATA	Hydrocarbons, liquid, n.o.s.
- Label	

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	3
Inland navigation (ADN)	3
Marine transport in accordance with IMDG	3
Air transport in accordance with IATA	3

14.4 Packing group

Transport by land according to ADR/RID	III
Inland navigation (ADN)	III
Marine transport in accordance with IMDG	III
Air transport in accordance with IATA	III

14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Maritime transport in bulk according to IMO instruments

No information available.

SECTION 15: Regulatory information

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2023)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	100 %

15.2 Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

EUH066 Repeated exposure may cause skin dryness or cracking.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Asp. Tox. 1: H304 May be fatal if swallowed and enters airways. (On basis of test data)
Flam. Liq. 3: H226 Flammable liquid and vapour. (On basis of test data)
Aquatic Chronic 4: H413 May cause long lasting harmful effects to aquatic life. (Calculation method)

Modified position

none