

version: 1.1 Revised: 23.10.2019
According to Regulation (EC) No. 1907/2006 and Regulation (EC) No. 453/2010 (REACH)

INOX ® Diesel Bactericide

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

1.1. Product

INOX Diesel Bactericide

1.2. Details of the manufacturer providing the safety data sheet

Company name: INOX Vertriebs GmbH
Street: Pestalozzistr. 49
Place: D-07318 Saalfeld
Telephone: +49-(0)3671-4609928
fax: +49-(0)3671- 4609929
e-mail: info@inox-vertrieb.de

1.3. Emergency number: (+49) 170 -3139585

2. Possible dangers:

2.1 Classification of the substance

Corrosive/irritant effect on skin, category 2,
H315 Severe eye damage/irritation, category 2,
H319 Hazardous to waters: Chronic, category 3, H412

2.2 Labelling elements according to Regulation (EC) No 1272/2008

Regulation (EC) No 1272/2008

Hazard-determining component(s) for labelling (product identifiers):

Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclic, < 2% aromatics

Signal word: Attention



Pictograms:

Danger warnings

- H315 Causes skin irritation.
- H319 Causes severe eye irritation.
- H412 Harmful to aquatic organisms, with long-term effects.

Safety Instructions

- P101 If medical advice is required, have packaging or identification label ready.
- P102 Keep out of the reach of children.
- P264 Wash skin thoroughly after use.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P302 + P352: IF IN CONTACT WITH SKIN: Wash with plenty of water/soap.
- P305 + P351 + P338 IN CONTACT WITH EYES: Rinse gently with water for several minutes. Remove any contact lenses if possible. Continue rinsing.
- P501 Dispose of contents/container to a recognized waste disposal facility.

2.3 Other risks

The product does not meet the PBT or vPvB criteria according to Annex XIII of the REACH Regulation.

3. Composition / Information on ingredients

3.1 Substances (information on formulation for mixtures)

This product is a mixture.

3.1.	Mixtures
Composition/information on the components Hazardous ingredients:	
Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclic, < 2% aromatics EC No.: 918-481-9	85-100 %
Asp. tox.1 H304 EU REACH-Reg. No.: 01-2119457273-39-xxxx	
Solvent Naphta heavy CAS 64742-94-5 Specific target organ toxicity (single exposure): Narcotic effect, category 3, H336 Aspiration hazard, category 1, H304 Hazardous to waters: Chronic, category 2, H411	5-7,5 %
1,2,4-Trimethylbenzene CAS 95-63-6 Flammable liquids, category 3, H226 Acute toxicity by inhalation, category 4, H332 Corrosive/irritant effect on skin, category 2, H315 Severe eye damage/irritation, category 2, H319 Specific target organ toxicity (single exposure): respiratory tract irritation, category 3, H335 Aspiration hazard, category 1, H304 Hazardous to waters: Chronic, category 2, H411	0.1-0.5 %
3,3'-Methylenebis[5-methyloxazolidine] CAS 66204-44-2	2,0-2,5 %

Acute toxicity dermal, category 4, H312
Acute toxicity oral, category 4, H302
Corrosive/irritant effect on the skin, category 1A, H314
Severe eye damage/irritation, category 1, H318

Mesitylene CAS 108-67-8 0,1-0,25 %
Flammable liquids, category 3, H226
Specific target organ toxicity (single exposure): Respiratory irritation, category 3, H335
Hazardous to waters: Chronic, category 2, H411

The codes of the hazard statements can be found in Section 16.
Substances on the so-called "Candidate List of Substances of Very High Concern (SVHC) for authorisation" of the European Chemicals Agency (ECHA) are not intentional components of this product. It is therefore not to be expected that those substances are found in the product in quantities of > 0.1%.

4. First aid measures

4.1. Description of first aid measures

General notes:

Remove casualties from the danger zone. Take off wet clothes immediately.
Do not leave the person concerned unattended.
Keep affected person quiet, covered and warm.

After inhalation:

Supply fresh air.
In case of breathing difficulties or respiratory arrest, initiate artificial respiration.
If sprayed vapors have been inhaled, consult a physician and show the package or MSDS.

After skin contact:

Wash thoroughly with soap and water. Cream with fatty lotion/ointment.

After eye contact:

Immediately rinse carefully and thoroughly with eye shower or water. Ophthalmologic treatment.

After swallowing:

Do not induce vomiting.
Do not give anything to eat or drink.
Call a doctor immediately.

Self protection of the first aider:

No personal risk. Wear protective clothing

4.2. Most important acute and delayed symptoms and effects

If swallowed with subsequent vomiting: DANGER OF ASPIRATION! Symptoms: Coughing, shortness of breath, cyanosis, irregular respiration, intercostal retraction as well as auscultatory fine vesicular rales and wheezing. Possible respiratory insufficiency and need for artificial respiration (chemical pneumonia) may occur as late as 24-48 hours after contact. Other symptoms: like unconsciousness, depression of the central nervous system, headache, nausea, dry skin and dizziness may occur.

4.3. Indications of immediate medical help or special treatment

Treat symptomatically. Oxygen ventilation if necessary. Regulation of the circulatory function, shock treatment if necessary. Subsequent observation for pneumonia and pulmonary edema.

5. Fire fighting measures

5.1 Extinguishing agents

Suitable extinguishing media: Water mist. Sand. Foam. Carbon dioxide.
Dry extinguishing agent.

Unsuitable extinguishing agents: Water jet

5.2 Special hazards arising from the substance or mixture

Special hazards for fire fighting:

Flammable liquid. Vapours may form explosive mixtures with air. Vapors are heavier than air and may spread over the ground. The product floats on water and does not dissolve. In case of fire, carbon oxides may be emitted

5.3 Instructions for fire fighting

Special protective equipment for fire fighting:

Special protective equipment for fire fighting:

In case of fire, wear self-contained breathing apparatus and suitable protective clothing (full protective suit).

6. Measures in case of unintentional release:

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions:

Use personal protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Keep away from heat and ignition sources. Avoid contact with eyes and skin. Do not breathe gas/fumes/vapour/spray.

Personnel not trained for emergency situations

Move untrained personnel out of the danger zone and notify trained personnel. If necessary, wear personal protective equipment (at least safety goggles with side protection, protective clothing and safety shoes) and never take any personal risk.

Emergency Services

The personal protective equipment must be adapted to the situation. At least safety glasses with side protection, protective clothing and safety shoes should be worn.

6.2 Environmental protection measures

Do not allow for substance to enter surface water or sewage system. Avoid penetration into the subsoil. In case of contamination of waters or sewerage system, inform the responsible authorities. In case of penetration into the soil inform the authorities.

6.3 Methods and material for retention and cleaning

Methods and material for retention and cleaning:

Ensure adequate ventilation. Danger of slipping in case of spillage. Retain leakage with liquid-binding material (sand, diatomite, acid binders, universal binders). Large spills should be taken up mechanically for disposal (remove by pumping). Treat the absorbed material according to the section on disposal.

Other information

In case of a major accident, evacuation and notification of the neighborhood and/or authorities are necessary. Notify the fire department or police if the product has entered water or sewage systems or has contaminated soil and plants. In case of unintentional release on the water, keep away any vessels. Inform harbour or water police and keep away the public.

6.4 additional notes

See section 1 for emergency information.

See Section 8 for information on protective equipment.

See Section 13 for information on waste disposal.

7. Handling and storage

7.1 Protective measures for safe handling Notes on safe handling

Wear personal protective equipment (see chapter 8).

Measures to prevent fires

Keep away from ignition and heat sources. Any measures required for fire safety and explosion protection must be agreed on with the responsible authorities.

Measures to prevent aerosol formation

During filling, decanting, mixing and dosing work as well as sampling, splash-proof, grounded devices and, if necessary, devices with local exhaust / gas displacement lines etc. must be used.

Measures to protect the environment:

All work processes must be designed in such a way that skin and eye contact as well as inhalation of vapors / mists / aerosols are kept to a minimum.

Notes on general hygiene at the workplace

Immediately remove soiled, soaked clothing. Do not inhale gas/smoke/vapour/aerosol. Avoid contact with skin and eyes. Keep away from food and drinks. Do not eat, drink or smoke in the area of application. Wash hands before breaks and at end of work.

7.2 Conditions for safe storage taking into account incompatibilities

Vapours/aerosols must be safely extracted directly at the point of origin. Use only in well-ventilated areas. Work areas should be designed in such a way that they can be cleaned at any time.

Packaging materials

Even empty containers can contain residues of the product and may be dangerous - continue to take precautions.

Suitable containers Tank

truck, IBC, drum, can

Suitable materials

stainless steel, carbon steel, polyethylene, polypropylene, Teflon

Unsuitable materials

Natural rubber, butyl rubber, EPDM, polystyrene

Requirements for storage rooms and containers

Keep container tightly closed in a dry, cool and well-ventilated place. Store in a place with solvent-proof floors.

Further information on storage conditions

Label and use containers according to regulations. Keep container closed. Store at room temperature. The product is stable and has a shelf life of at least 1 year when stored properly

7.3

Specific end uses

No data available.

7.3 Specific end uses Specific use(s): No information available. **Information on combined storage:**

Incompatible with oxidizing agents.

Storage class (LGK): 10 Flammable liquids

8. Exposure controls/personal protection

8.1 Parameters to be monitored

Derived exposure level without adverse effects (Derived No Effect Level):

Ingredient: hydrocarbon mixture C9-C15 aliphatics

TRGS 900, AGW: 600 mg/m³, (2(II))

hydrocarbon mixtures, use as solvent (solvent hydrocarbons), additive-free

8.2 Limitation and monitoring of exposure

Suitable technical control equipment

Technical measures and the application of suitable working procedures have priority over the use of personal protective equipment.

Personal protective equipment

Respiratory protection

In case of insufficient ventilation, wear breathing apparatus. Required when limit values are exceeded. In case of short term or low exposure use breathing filter device. In case of intensive or longer exposure use self-contained breathing apparatus.

Recommended filter type: Filter type A for organic gases and vapors.

Hand protection

Solvent-resistant gloves Observe the manufacturer's specifications regarding permeability and breakthrough time as well as the special conditions at the workplace (mechanical stress, contact duration). Protective gloves should be replaced at the first signs of wear.

The following materials are suitable: material: Nitrile rubber

Breakthrough time: ≥ 480 min

glove thickness: 0,45 mm

Eye protection

Tightly fitting safety goggles

Skin and body protection

Flame-retardant antistatic protective clothing. solvent-resistant protective clothing

Other protective measures

The choice of personal protective equipment depends on the hazard posed by the product, the workplace and the handling. Depending on the intended use, the appropriate protective equipment must be agreed on with the manufacturer of the personal protective equipment and the authorities. Any person who

enters the area where the product is handled must wear at least safety goggles with side protection.

Thermal hazards

The product is flammable and may form flammable gas/air mixtures.

Environmental exposure controls General information:

Do not allow for substance to enter surface water or sewage system.

Avoid penetration into the subsoil.

Inform the responsible authorities in case of contamination of water or the sewage system.

Notify authorities in case of soil intrusion.

Limitation and monitoring of consumer exposure

Measures related to the use of the substance (as such or in mixtures) by the consumer

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

shape:	liquid
Color:	colorless-light bluish
Smell:	characteristic
Odour threshold:	No data available
pH value:	Not applicable
Freezing point/freezing range:	< -20 °C
Boiling point/boiling range:	175 - 210 °C
Flash point:	> 61 °C
Evaporation rate:	0.04 (butyl acetate = 1)
Flammability (solid, gaseous):	The product is flammable, but not easily ignited.
Upper explosion limit:	7 %(V)
Lower explosion limit:	0,5 %(V)
vapour pressure:	approx. 0.6 hPa (25 °C)
Relative vapour density:	> 1 (air = 1.0)
density:	0.815-0.83 g/cm ³ (15 °C)
Solubility in water:	(20 °C) not or only slightly miscible
Partition coefficient: n-octanol/water:	No data available Auto ignition
temperature:	> 200 °C
Thermal decomposition:	No data available
Viscosity, kinematic:	1.0 - 2.5 mm ² /s (20 °C)

Explosion hazard:
/air mixtures is possible.

The formation of explosive steam-

Oxidizing properties:
VOC

None known.
100 %

9.2 Other information

No further information available.

10. Stability and reactivity

10.1. Reactivity

No decomposition if stored and used as intended.

10.2. Chemical stability:

The product is chemically stable under normal environmental conditions (room temperature).

10.3. Possibility of hazardous reactions

Hazardous reactions

The formation of explosive steam/air mixtures is possible.

10.4. Conditions to avoid

Conditions to avoid: Heat, flames
and sparks.

10.5. Thermal decomposition:

No data available

10.6. Incompatible materials

Materials to avoid:

Strong oxidizing agents

10.7. Hazardous decomposition products

Hazardous decomposition products:

In case of fire the following substances may be released: Carbon oxides, Under certain fire conditions traces of other toxic products cannot be excluded.

11. Toxigological data

11.1. Information on toxicological effects

Acute toxicity

Components that may contribute to acute oral toxicity. 3,3'-

Methylenebis[5-methyloxazolidine] CAS 66204-44-2

LD 50 (oral): ATE 500 mg/kg

Calculated acute oral toxicity ATE (mix): 21739 mg/kg

Components that may contribute to acute dermal toxicity 3,3'-Methylenebis[5-methyloxazolidine] CAS 66204-44-2

LD 50 (dermal): ATE 1100 mg/kg

Calculated estimate of acute dermal toxicity ATE (mix): 47826 mg/kg

Components that may contribute to acute inhalation toxicity. 1,2,4-trimethylbenzene CAS 95-63-6

LC 50 (inhaled): ATE 11 mg/l/4h

Calculated estimated acute inhalative toxicity ATE (mix): 2444 mg/l/4h

Corrosive/irritant effect on the skin

Relevant ingredients:

1,2,4-trimethylbenzene CAS 95-63-6 additive,

Classification of the substance: Category 2

SCL: Category 2: 10 % (General limit value) This ingredient has been classified as not relevant.

3,3'-Methylenbis[5-methyloxazolidin] CAS 66204-44-2 additiv,

Classification of the substance: Category 1A

Category 1A: 5% (General limit) Category 1B: 5% (General limit) Category 1C: 5% (General limit) Category 2: 10% (General limit)

Result: The mixture is classified in category 2.

Severe eye damage/irritation Relevant ingredients:

1,2,4-trimethylbenzene CAS 95-63-6 additive,

Classification of the substance: Category 2

SCL: Category 2: 10 % (General limit value) This ingredient has been classified as not relevant.

3,3'-Methylenbis[5-methyloxazolidin] CAS 66204-44-2 additiv,

Classification of the substance: Category 1

Category 1: 3 % (General limit) Category 2: 10 % (General limit) Result: The mixture is classified in category 2.

Specific target organ toxicity (single exposure): Respiratory irritation

Relevant ingredients:

1,2,4-Trimethylbenzene CAS 95-63-6

Classification of the substance: Category 3

SCL: Category 3: 20 % (General limit)

Mesitylene CAS 108-67-8

Classification of the substance:

Category 3 Category 3: 25

The mixture is not classified in this hazard category.

Specific target organ toxicity (single exposure): Anaesthetic effect Relevant ingredients:

Solvent Naphta heavy CAS 64742-94-5

Classification of the substance: Category 3

SCL: Category 3: 20 % (General limit)

The mixture is not classified in this hazard category.

Further Information

Experience with human exposure

The slightest amounts that enter the lungs when swallowed or subsequently vomited can lead to pulmonary oedema or pneumonia.

12. Environmental information

12.1. Toxicity

Ingredient: hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclic, < 2% aromatics

Acute toxicity fish

LL50 > 1000 mg/l (freshwater fish; 96 h) (toxicity to fish; OECD test guideline 203)

Toxicity to daphnia and other aquatic invertebrates.

EL50 > 1000 mg/l (Daphnia magna; 48 h) (Daphnia toxicity; OECD test guideline 202)

Algae

EL50 > 1000 mg/l (Pseudokirchneriella subcapitata (green algae); 72 h)
(Toxicity to algae; OECD test guideline 201)

Chronic toxicity fish

NOELR 0.088 mg/l (fish; 28 d)

Aquatic invertebrates

NOELR 0.026 mg/l (Daphnia magna (large water flea); 21 d)

Components that can contribute to chronic water pollution.

1,2,4-Trimethylbenzene CAS 95-63-6, Category 2

Mesitylene CAS 108-67-8, Category 2

Solvent Naphta heavy CAS 64742-94-5, Category 2

Result: The mixture is classified in category 3.

12.2. Persistence and degradability

Ingredient: hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclic, < 2% aromatics

Persistence and degradability

Persistence

Result Transformation by photolysis is not expected to be significant.
Transformation by hydrolysis is not expected to be significant.

Biodegradability

Result 80 % (exposure duration: 28 d) Readily biodegradable.

12.3. Bioaccumulation potential

Ingredient: hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclic, < 2% aromatics

Bioaccumulation

Result No data available

12.4. Mobility in soil

Ingredient: hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclic, < 2% aromatics

Mobility

Result Highly volatile, is quickly distributed in the air, Probably there is
no distribution to the sediment layer and wastewater
solids.

12.5. Results of PBT and vPvB assessment

Ingredients: hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclic, < 2% aromatic result: This
substance is neither persistent, bioaccumulative nor toxic (PBT), This substance is not
very persistent and very bioaccumulative (vPvB).

12.6. Other harmful effects Other ecological information

Result Do not allow to enter surface water or sewage system.

13. Notes on disposal

13.1 Waste treatment procedures:

Disposal according to local regulations.

Hazardous waste according to the Waste Catalogue Ordinance (AVV). If recycling is not possible,
waste must be disposed in accordance with local official regulations. Discuss the exact waste code
with the waste disposal company.

Waste key number: AVV 20 01 29*

Cleaning agents containing dangerous substances

Disposal of uncleaned packaging

Completely empty, not dried out containers must be disposed of like containers with harmful residues.

15 01 10 (packaging containing residues of or contaminated by dangerous substances).

Detergents

Empty residues. Do not burn empty containers or treat with cutting torch. Risk of explosion. Dispose of empty containers at an approved waste disposal facility for recovery or disposal.

Non-contaminated and cleaned packaging can be recycled. Recommended cleaning agent

14. Transport information

No dangerous goods for ADR, RID, IMDG and IATA.

14.1. UN number not applicable

14.2. UN proper shipping name not applicable

14.3. Hazard group(s) Transport not applicable

14.4. Packaging group not applicable

14.5. Environmental hazards not applicable

14.6. No special precautions for the user

14.7. Carriage in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG: not applicable

15. Legislation

15.1. Regulations on safety, health and environmental protection/specific legal provisions for the substance or mixture

EU regulations

Regulation (EC) No 1005/2009 (substances that deplete the ozone layer):

Not applicable

Regulation (EC) No 850/2004 (Persistent Organic Pollutants):

Not applicable

Regulation (EC) No 649/2012 (export and import of dangerous chemicals):

Not applicable

Regulation (EC) No 649/2004 (Detergents Regulation):

The product meets the criteria laid down in Regulation (EC) No 648/2004.

Approval according to Title VII of Regulation (EC) No 1907/2006:

None

Restrictions under Title VIII of Regulation (EC) No 1907/2006:

Observe the restriction in Annex XVII, entry 3.

National regulations

WGK (DE) WGK 1: slightly hazardous to water: 27; classification according to VwVwS of 17 May 1999, Annex 2

Reference to Technical Rules for Hazardous Substances (TRGS) Observe protective measures according to TRGS 5001.

Location class according to TRGS 5101 : 3 (Flammable liquids)

Solvents Ordinance (31. BImSchV)

VOC percentage: 97% (calculated)

15.2. Chemical Safety Assessment

The mixture has not been subjected to a safety assessment.

16. other information

Changes since the last version

See sections/sub-sections

Full text of the hazard codes in sections 2 and 3.

H226 Flammable liquid and steam.

H302 Harmful if swallowed.

H304 May be fatal if swallowed or if it enters the respiratory system.

H312 Harmful by skin contact.

H314 Causes severe skin burns and severe eye damage.

H315 Causes skin irritation.

H318 Causes severe eye damage.

H319 Causes severe eye irritation.

H332 Harmful by inhalation.

H335 May cause respiratory irritation.

H336 May cause drowsiness and dizziness.

H410 Very toxic to aquatic organisms with long-term effects.

Abbreviations and acronyms

BCF	Bioconcentration factor
BSB	biochemical oxygen demand
CAS	Chemical Abstracts Service
CLP	Classification, labelling and packaging
CMR	carcinogenic, mutagenic or toxic to reproduction
COD	chemical oxygen demand
DNEL	Derived exposure level without adverse effects
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European list of notified chemical substances
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
LC50	Median metal concentration
LOAEC	lowest concentration with observable adverse effect
LOAEL	lowest dose with observable adverse effect
LOEL	lowest dose with observable effect
NLP	Non-longer polymer
NOAEC	Concentration with no observed adverse effect
NOAEL	Dose with no observable adverse effect

NOEC	highest tested concentration without observed adverse effect
NOEL	Dose without observable effect
OECD	Organization for Economic Cooperation and Development
OEL	Limit value for exposure at the workplace
PBT	persistent, bioaccumulative and toxic
PNEC	estimated non-effect concentration
STOT	Specific target organ toxicity
SVHC	substance of very high concern
UVCB substances	Substances with unknown or variable composition, complex reaction products and biological Materials
vPvB	very persistent and very bioaccumulative

Appendix for Explosion Scenarios

No.	Short title	Main address	Application	Product	Process -	
		Environmental release	Product- category	Species- category	ungslategorie (ERC)	fication (AC)
1	Use in cleaning medium 35, 38	21 NA	3, 4, 8, 9c, 24,	NA	8a, 8d	NA ES17378
2	Use in cleaning agents 13, 19	22 ES17339	NA	NA	1, 2, 3, 4, 8a, 8b, 10, 11,	8a, 8d NA

Further details

The information is based on the present state of our knowledge, but it does not represent a guarantee of product characteristics and does not establish a contractual legal relationship. Existing laws and regulations must be observed by the recipient of products at their own risk/responsibility.

Disclaimer clause

The above information is correct to the best of our knowledge; however, it does not purport to be complete and should therefore be considered a guide only. The company cannot be held responsible for any damage caused by handling or contact with the above product.