

ISOFLEX NBU 15

Version 1.2

Revision Date 17.06.2015

Print Date 18.06.2015

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

1.1 Product identifier

Product name : ISOFLEX NBU 15

Article-No. : 004026

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

Use of the Substance/Mixture : Grease

Recommended restrictions on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

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Deutschland
Tel: +49 (0) 897876-0
Fax: +49 (0) 897876-333

E-mail address : mcm@klueber.com
Responsible/issuing person : Material Compliance Management

National contact : Klüber Lubrication Great Britain Limited
Unit 10 Pennine Business Park
Longbow Close
Huddersfield
West Yorkshire HD2 1GQ
Great Britain
Tel: +44-1422-205115
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sales@uk.klueber.com

1.4 Emergency telephone number

0049 (0) 897876-700 (24hrs)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture.

2.2 Label elements

ISOFLEX NBU 15

Version 1.2

Revision Date 17.06.2015

Print Date 18.06.2015

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Additional Labelling:

EUH210 Safety data sheet available on request.

EUH208 Contains: N-alkylated benzotriazole May produce an allergic reaction.

2.3 Other hazards

3. Composition/information on ingredients

3.2 Mixtures

Chemical nature : Mineral oil.
Synthetic hydrocarbon oil
ester oil
barium complex soap

Hazardous components

Chemical Name	CAS-No. EC-No. Index-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Dec-1-ene, homopolymer, hydrogenated + 7- methylpentadecane; tetra-1-decen, dimer, trimer, hydrogenated	68037-01-4 1000172-11-1		Asp. Tox. 1; H304	>= 10 - < 20
Benzenamine, N- phenyl-, reaction products with 2,4,4- trimethylpentene	68411-46-1 270-128-1	R52/53	Aquatic Chronic 3; H412	>= 1 - < 2.5

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First aid measures

4.1 Description of first aid measures

If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.
Keep patient warm and at rest.
If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.
In case of contact, immediately flush skin with plenty of water.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
If eye irritation persists, consult a specialist.

ISOFLEX NBU 15

Version 1.2

Revision Date 17.06.2015

Print Date 18.06.2015

If swallowed : Move the victim to fresh air.
Do not induce vomiting without medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

Risks : None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Fire may cause evolution of:
Carbon oxides
Metal oxides
Nitrogen oxides (NOx)

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.
In the case of respirable dust and/or fumes, use self-contained breathing apparatus.
Exposure to decomposition products may be a hazard to health.

Further information : Standard procedure for chemical fires.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.
Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).
Avoid breathing dust.
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water courses.
Local authorities should be advised if significant spillages

ISOFLEX NBU 15

Version 1.2

Revision Date 17.06.2015

Print Date 18.06.2015

cannot be contained.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Clean up promptly by sweeping or vacuum.
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Wash hands and face before breaks and immediately after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container.
Keep container closed when not in use.
Keep in a dry, cool and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Store in accordance with the particular national regulations.
Keep in properly labelled containers.

7.3 Specific end use(s)

: Consult the technical guidelines for the use of this substance/mixture.

8. Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Respiratory protection : Not required; except in case of aerosol formation.
Filter type P

Hand protection : Wear protective gloves.
The selected protective gloves have to satisfy the

ISOFLEX NBU 15

Version 1.2

Revision Date 17.06.2015

Print Date 18.06.2015

specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.
In case of contact through splashing:

: Nitrile rubber
Protective index Class 1

Eye protection : Tightly fitting safety goggles
Safety glasses with side-shields conforming to EN166

Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.

Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Environmental exposure controls

General advice : Try to prevent the material from entering drains or water courses.
Local authorities should be advised if significant spillages cannot be contained.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form : paste

Colour : beige

Odour : characteristic

Odour Threshold : No data available

pH : not applicable

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : not applicable

Evaporation rate : No data available

Flammability (solid, gas) : No data available
Combustible Solids

Lower explosion limit : No data available

Upper explosion limit : No data available

Vapour pressure : < 0.001 hPa, 20 °C

ISOFLEX NBU 15

Version 1.2

Revision Date 17.06.2015

Print Date 18.06.2015

Relative vapour density	: No data available
Density	: 0.99 g/cm ³ , 20 °C
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Ignition temperature	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Oxidizing properties	: No data available

9.2 Other information

Sublimation point	: not applicable
Bulk density	: not applicable

10. Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No conditions to be specially mentioned.

10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

10.6 Hazardous decomposition products

Hazardous decomposition products : No decomposition if stored and applied as directed.

11. Toxicological information

11.1 Information on toxicological effects

Product

Acute inhalation toxicity	: This information is not available.
Skin corrosion/irritation	: This information is not available.
Serious eye damage/eye	: This information is not available.

ISOFLEX NBU 15

Version 1.2

Revision Date 17.06.2015

Print Date 18.06.2015

irritation

Respiratory or skin sensitisation : This information is not available.

Germ cell mutagenicity

Genotoxicity in vitro : No data available

Genotoxicity in vivo : No data available

Carcinogenicity : No data available

Reproductive toxicity : No data available

Teratogenicity : No data available

Repeated dose toxicity : This information is not available.

Aspiration toxicity : This information is not available.

Further information : Information given is based on data on the components and the toxicology of similar products.

Components:

Dec-1-ene, homopolymer, hydrogenated + 7-methylpentadecane; tetra-1-decen, dimer, trimer, hydrogenated :

Acute oral toxicity : LD50: > 5,000 mg/kg, rat

Acute dermal toxicity : LD50: > 2,000 mg/kg, rat, OECD Test Guideline 402, The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation : rabbit, Result: No skin irritation, Classification: No skin irritation, OECD Test Guideline 404, GLP: yes

Serious eye damage/eye irritation : rabbit, Result: No eye irritation, Classification: No eye irritation, OECD Test Guideline 405, GLP: yes

Respiratory or skin sensitisation : Maximisation Test (GPMT), guinea pig, Result: Does not cause skin sensitisation., Classification: Does not cause skin sensitisation., OECD Test Guideline 406, GLP: yes

Germ cell mutagenicity

Genotoxicity in vitro : Ames test, Result: negative, Mutagenicity (Escherichia coli - reverse mutation assay), GLP: yes

Assessment : Animal testing did not show any mutagenic effects.

Aspiration toxicity : May be fatal if swallowed and enters airways.

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene :

Acute oral toxicity : LD50: > 5,000 mg/kg, rat, OECD Test Guideline 401

Acute dermal toxicity : LD50: > 2,000 mg/kg, rat, OECD Test Guideline 402

Skin corrosion/irritation : rabbit, Result: No skin irritation, Classification: No skin irritation

Serious eye damage/eye irritation : rabbit, Result: No eye irritation, Classification: No eye irritation

Respiratory or skin : guinea pig, Result: Does not cause skin sensitisation.,

ISOFLEX NBU 15

Version 1.2

Revision Date 17.06.2015

Print Date 18.06.2015

sensitisation

Classification: Does not cause skin sensitisation., OECD Test Guideline 406

12. Ecological information

12.1 Toxicity

Product:

Toxicity to fish	:	No data available
Toxicity to daphnia and other aquatic invertebrates	:	No data available
Toxicity to algae	:	No data available
Toxicity to bacteria	:	No data available

Components:

Dec-1-ene, homopolymer, hydrogenated + 7-methylpentadecane; tetra-1-decen, dimer, trimer, hydrogenated :

Toxicity to fish	:	LC50: > 1,000 mg/l, 96 h, Oncorhynchus mykiss (rainbow trout), static test, OECD Test Guideline 203, GLP: yes
Toxicity to daphnia and other aquatic invertebrates	:	EC50: > 1,000 mg/l, 48 h, Daphnia magna (Water flea), Immobilization, OECD Test Guideline 202, GLP: yes
Toxicity to algae	:	ErC50: > 1,000 mg/l, 72 h, Scenedesmus capricornutum (fresh water algae), Growth inhibition, OECD Test Guideline 201, GLP: yes
Toxicity to bacteria	:	EC50: > 1,000 mg/l, 3 h, Bacteria, Respiration inhibition, OECD 209, GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 125 mg/l, 21 d, Daphnia magna (Water flea)
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Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene :

Toxicity to fish	:	LC50: > 100 mg/l, 96 h, Danio rerio (zebra fish), OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50: 51 mg/l, 48 h, Daphnia magna (Water flea), Immobilization, OECD 202 T1

Ecotoxicology Assessment

Acute aquatic toxicity	:	Harmful to aquatic life.
Chronic aquatic toxicity	:	Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

ISOFLEX NBU 15

Version 1.2

Revision Date 17.06.2015

Print Date 18.06.2015

Product:

Biodegradability : No data available
Physico-chemical : No data available
removability

Components:

Dec-1-ene, homopolymer, hydrogenated + 7-methylpentadecane; tetra-1-decen, dimer, trimer, hydrogenated :

Biodegradability : Primary biodegradation, Result: Not readily biodegradable., activated sludge, OECD Test Guideline 301B

12.3 Bioaccumulative potential

Product:

Bioaccumulation : This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT)., This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Components:

Dec-1-ene, homopolymer, hydrogenated + 7-methylpentadecane; tetra-1-decen, dimer, trimer, hydrogenated :

Bioaccumulation : Bioconcentration factor (BCF): > 10

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene :

Bioaccumulation : Due to the distribution coefficient n-octanol/water, accumulation in organisms is possible.

12.4 Mobility in soil

Product:

Mobility : No data available
Distribution among : No data available
environmental compartments

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.

Components:

Dec-1-ene, homopolymer, hydrogenated + 7-methylpentadecane; tetra-1-decen, dimer, trimer, hydrogenated :

Assessment : Non-classified PBT substance, Non-classified vPvB substance

12.6 Other adverse effects

Product:

Additional ecological : No information on ecology is available.
information

ISOFLEX NBU 15

Version 1.2

Revision Date 17.06.2015

Print Date 18.06.2015

13. Disposal considerations

13.1 Waste treatment methods

- | | |
|------------------------|---|
| Product | : The product should not be allowed to enter drains, water courses or the soil. |
| | : Waste codes should be assigned by the user based on the application for which the product was used. |
| Contaminated packaging | : Empty containers can be landfilled, when in accordance with the local regulations. |

14. Transport information

14.1 UN number

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.2 Proper shipping name

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.3 Transport hazard class

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.4 Packing group

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.5 Environmental hazards

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

ISOFLEX NBU 15

Version 1.2

Revision Date 17.06.2015

Print Date 18.06.2015

Not dangerous goods

14.6 Special precautions for user

No data available

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

Not available

15. Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Major Accident Hazard Legislation : 96/82/EC Update: not applicable

15.2 Chemical Safety Assessment

This information is not available.

16. Other information

Full text of R-phrases referred to under sections 2 and 3

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under sections 2 and 3.

H304 May be fatal if swallowed and enters airways.
H412 Harmful to aquatic life with long lasting effects.

Further information

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ISOFLEX NBU 15

Version 1.2

Revision Date 17.06.2015

Print Date 18.06.2015
