

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 its amendment
(453/2010)

Product: **Ekaland NDBC C**

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SDS No.: 100029-100 (Version 1.0)

Date 14.11.2014

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Identification of the product

Identification of the mixture: Ekaland NDBC C

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

Use of the Substance/Mixture : Antioxidant

1.3. Details of the supplier of the safety data sheet

Supplier	MLPC International 209, avenue Charles Despiau F-40370 RION-LES-LANDES Tel. + 33 (0) 5 58 57 02 00 http://www.mlpc-intl.com fds@mlpc-intl.com
E-mail address	

1.4. Emergency telephone number

+44 (0) 1235 239 670 (Carechem24 – MLPC 29003) **Europe**
001866 928 0789 (Carechem24 – MLPC 29003) **Americas**
+65 3158 1074 (Carechem24 – MLPC 29003) **Asia-pacific region** (excluding China)
+86 400 6267911 **China mainland**

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008):

The transition time according to the Regulation N°1272/2008 is still not expired.

Classification according to EU Directives 1999/45/EC :

This mixture is not classified as dangerous according to Directive 1999/45/EC.

2.2. Label elements

Label elements (D. 1999/45/EC amended by D. 2006/8/CE):

2.3. Other hazards : None.

Other:

Results of PBT and vPvB assessment : The transition time according to REACH Regulation, Article 23, is still not expired.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Chemical nature of the mixture¹:

Hazardous components (according to Regulation (EC) No. 1907/2006 its amendment (453/2010)) :

Chemical Name ¹ & REACH Registration Number ²	EC-No.	CAS-No.	Concentration	Classification Directive 67/548/EEC	Classification REGULATION (EC) No 1272/2008
Nickel bis(dibutyldithiocarbamate)	237-696-2	13927-77-0	>= 96 %	WEL substance	
Distillates (petroleum), hydrotreated light paraffinic	265-158-7	64742-55-8	1 - 2%	Nota L: DMSO <3% Carc.Cat.2; R45	AH 1; H304 Nota L: DMSO <3%

¹: See chapter 14 for Proper Shipping Name

²: See the text of the regulation for applicable exceptions or provisions : The transition time according to REACH Regulation, Article 23, is still not expired.

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

4. FIRST AID MEASURES

4.1. & 4.2. Description of necessary first-aid measures & Most important symptoms/effects, acute and delayed:

General advice:

Take off immediately all contaminated clothing.

Inhalation:

Move to fresh air. Oxygen or artificial respiration if needed. Consult a physician.

Skin contact:

Wash off immediately with soap and plenty of water.

Eye contact:

Wash well-open eyes immediately, abundantly and thoroughly with water. Consult an ophthalmologist immediately.

Ingestion:

If swallowed, do not induce vomiting - seek medical advice.

Protection of first-aiders:

In case of insufficient ventilation, wear suitable respiratory equipment.

4.3. Indication of immediate medical attention and special treatment needed, if necessary : No data available.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Water spray, Foam, Dry powder

Unsuitable extinguishing media: All other extinguishants

5.2. Special hazards arising from the substance or mixture:

Thermal decomposition gives :, Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Sulphur oxides

5.3. Advice for firefighters:

Specific methods:

Remove all sources of ignition. Suppress gases, fumes and/or dust with water spray jet.

Special protective actions for fire-fighters:

Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Avoid contact with skin and eyes and inhalation of dust.

6.2. Environmental precautions:

Do not let product enter drains. Do not contaminate surface water.

6.3. Methods and materials for containment and cleaning up:

Recovery:

Shovel or sweep up. Recover the product and place in a dry labelled container.

Elimination:

Destroy the product by incineration (in accordance with local and national regulations).

6.4. **Reference to other sections:** None.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling:

Technical measures/Precautions:

Storage and handling precautions applicable to products: Dust forming. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Provide water supplies, ocular fountains and showers near the point of use.

Hygiene measures:

General industrial hygiene practice. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Wash hands after handling. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities:

Keep in a well-ventilated place. Keep in a dry place. Store protected from moisture.

Incompatible products:

Strong acids, Oxidizing agents

Packaging material:

Recommended: Paper bags, Big bags.

7.3. **Specific end use(s):** None.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters:

Exposure Limit Values Not relevant

Derived No Effect Level (DNEL): No data available.

Predicted No Effect Concentration: No data available.

8.2. Exposure controls:

General protective measures: Ensure sufficient air exchange and/or exhaust in work areas

Personal protective equipment:

Respiratory protection:	Effective dust mask.
Hand protection:	Impervious gloves
Eye/face protection:	Tightly fitting safety goggles
Skin and body protection:	At the workplace : Protective suit.

Environmental exposure controls: See chapter 6

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:

Physical state (20°C):	solid
Form:	powder
Colour:	green
Odour:	No data available.
Offactory threshold:	No data available.
pH:	No data available.
Melting point :	87 °C
Boiling point/boiling range:	No data available.
Flash point:	Not applicable
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Vapour pressure:	No data available.
Vapour density:	No data available.
Density:	1,3 g/cm3

Bulk density:	400 kg/m ³
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

9.2. Other data:

Molecular weight:	468 g/mol
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10. STABILITY AND REACTIVITY

10.1. & 10.2. Reactivity & Chemical stability:

Product stable in the absence of moisture

10.3. Possibility of hazardous reactions: No data available.

10.4. Conditions to avoid:

Store protected from moisture and heat. Protect from light. Keep away from direct sunlight.

10.5. Incompatible materials to avoid: No data available.

10.6. Hazardous decomposition products:

Nitrogen oxides (NO_x), Carbon dioxide (CO₂), Sulphur oxides, Nickel sulfides

11. TOXICOLOGICAL INFORMATION

All available data on this product and/or the components quoted in section 3 and/or the analogue substances/metabolites have been taken into account for the hazard assessment.

11.1. Information on toxicological effects:

Acute toxicity:

Inhalation: According to its composition, can be considered as : Slightly or not harmful by inhalation

NICKEL BIS(DIBUTYLDITHIOCARBAMATE) :

- In animals : No mortality/4 h/Rat: 0,416 mg/l (Aerosol)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals : No mortality/4 h/Rat: 5,53 mg/l (Method: OECD Test Guideline 403) (Aerosol)

Ingestion: According to its composition, can be considered as : Slightly or not harmful by ingestion

NICKEL BIS(DIBUTYLDITHIOCARBAMATE) :

- In animals : No mortality/Rat: 5.000 mg/kg (50 %)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals : No mortality/Rat: 5.000 mg/kg (Method: OECD Test Guideline 401)

Dermal: According to its composition, can be considered as : Slightly or not harmful in contact with skin

NICKEL BIS(DIBUTYLDITHIOCARBAMATE) :

- In animals : No mortality/Rabbit: 2.000 mg/kg

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals : No mortality/Rabbit: 5.000 mg/kg (Method: OECD Test Guideline 402)

Local effects (Corrosion / Irritation / Serious eye damage):

Skin contact: According to its composition, can be considered as : Non irritating to skin

NICKEL BIS(DIBUTYLDITHIOCARBAMATE) :

- In animals : No skin irritation (after occlusive contact, Rabbit, Exposure time: 24 h)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals : Slightly irritating to skin. (Rabbit, Exposure time: 24 h)

Eye contact: According to its composition, can be considered as : Not irritating to the eyes.

NICKEL BIS(DIBUTYLDITHIOCARBAMATE) :

- In animals : Mild eye irritation (Rabbit)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals : No eye irritation (OECD Test Guideline 405, Rabbit)

Respiratory or skin sensitisation:

Inhalation: No data available.

Skin contact: According to its composition, can be considered as : Not a skin sensitizer

NICKEL BIS(DIBUTYLDITHIOCARBAMATE) :

- In animals : No effect is reported. (Method : Buehler Test, Guinea pig)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals : Not a skin sensitizer (Method : OECD Test Guideline 406 Guinea pig maximization test)

CMR effects :

Mutagenicity: Results from tests do not lead to considering the product as genotoxic

In vitro

NICKEL BIS(DIBUTYLDITHIOCARBAMATE) :

Ames test in vitro: Inactive
May be considered as comparable to a similar product for which experimental results are:

BIS(DIBUTYLDITHIOCARBAMATO-S,S')COPPER :

Ames test in vitro: Inactive (Method: OECD Test Guideline 471)
Tests for chromosome aberrations in vitro on mammalian cells: Inactive (Method: OECD Test Guideline 473)
In vitro gene mutations test on mammalian cells: Inactive (Method: OECD Test Guideline 476)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

Ames test in vitro: Inactive (Method: OECD Test Guideline 471)
In vitro test for chromosomal abnormalities on CHO cells: Inactive (Method: OECD Test Guideline 473)
In vitro gene mutations test on mammalian cells: Inactive (Method: OECD Test Guideline 476)

In vivo

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

Micronucleus test in vivo mouse: Inactive (Method: OECD Test Guideline 474)

Carcinogenicity: Based on the available information, it is not possible to conclude on the hazard potential of this mixture.

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals : Absence of carcinogenic effects (Method: OECD Test Guideline 451, mice, Chronic, dermal route)

Reproductive toxicity:

Fertility: Based on the available data, the substance is not suspected of having reprotoxic potential.

NICKEL BIS(DIBUTYLDITHIOCARBAMATE) :

May be considered as comparable to a similar product for which experimental results are:

BIS(DIBUTYLDITHIOCARBAMATO-S,S')COPPER :

- In animals : Absence of toxic effects upon the reproductive system
NOAEL (Parental toxicity): 1.000 mg/kg bw/day
NOAEL (Fertility): 1.000 mg/kg bw/day
(Method: OECD Test Guideline 421, Rat, By oral route)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals : Reproduction Test: No toxicity to reproduction
NOAEL (Parental toxicity): 1.000 mg/kg bw/day
NOAEL (Fertility): 1.000 mg/kg bw/day
(Method: OECD Test Guideline 421, Rat, By oral route)

Foetal development: Based on the available data, the substance is not suspected of having developmental toxicity potential.

NICKEL BIS(DIBUTYLDITHIOCARBAMATE) :

May be considered as comparable to a similar product for which experimental results are:

BIS(DIBUTYLDITHIOCARBAMATO-S,S')COPPER :

- In animals : May be considered as comparable to a similar product for which experimental results are:
Absence of toxic effects for foetal development
NOAEL (Developmental Toxicity): 250 mg/kg bw/day
NOAEL (Maternal Toxicity): 125 mg/kg bw/day
(Method: OECD Test Guideline 414, Rat, By oral route)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals :
Absence of toxic effects for foetal development.
NOAEL (Developmental Toxicity) : 2.000 mg/kg bw/day
NOAEL (Maternal Toxicity) : < 125 mg/kg bw/day
(Method: OECD Test Guideline 414, Rat, dermal route)

Specific target organ toxicity :

Single exposure : No data available.

Repeated exposure: **The substance or mixture is not classified as specific target organ toxicant, repeated exposure.**

NICKEL BIS(DIBUTYLDITHIOCARBAMATE) :

May be considered as comparable to a similar product for which experimental results are:

BIS(DIBUTYLDITHIOCARBAMATO-S,S')COPPER :

May be considered as comparable to a similar product for which experimental results are:

- In animals :
By diet: No specific toxic effects
NOAEL= 41 mg/kg (Rat, 48 d)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals :
By inhalation: No effect is reported.
NOAEL= > 1 mg/l (Rat, 4 Weeks) (Aerosol)
dermal route: No effect is reported.
NOAEL= > 2.000 mg/kg (Method: OECD Test Guideline 411, Rat, 3 months)
By oral route: (Results obtained on a similar product).
Target organs: Reproductive organs, Stomach, Liver, Thymus, NOAEL= < 125 mg/kg (Method: OECD Test Guideline 408, Rat, 3 months)

Aspiration hazard:

Not applicable

Further information:

Use of alcoholic beverages when exposed to the product may result in adverse health effects (Antabuse effect)

12. ECOLOGICAL INFORMATION

Ecotoxicology Assessment: All available data on this product and/or the components quoted in section 3 and/or the analogue substances/metabolites have been taken into account for the hazard assessment.

12.1. Toxicity :

Fish: **Based on the available information, it is not possible to conclude on the hazard potential of this mixture.**

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :
LL50, 96 h (Pimephales promelas (fathead minnow)) : > 100 mg/l (Method: OECD Test Guideline 203)

Aquatic invertebrates: **Based on the available information, it is not possible to conclude on the hazard potential of this mixture.**

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :
LL50, 48 h (Daphnia magna (Water flea)) : > 10.000 mg/l (Method: OECD Test Guideline 202, pH: 7,7, Immobilization)

Aquatic plants: **Based on the available information, it is not possible to conclude on the hazard potential of this mixture.**

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :
LL50, 72 h (Pseudokirchneriella subcapitata (microalgae)) : > 100 mg/l (Method: OECD Test Guideline 201, growth rate inhibition)

Microorganisms:

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :
NOEC, 4 d (Photobacterium phosphoreum) : > 1,93 mg/l (Method: DIN 38412)

Aquatic toxicity / Long term toxicity:

Aquatic invertebrates:

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :
NOEC, 21 d (Daphnia magna (Water flea)) : 10 mg/l (Method: OECD Test Guideline 211, Growth inhibition/Reproduction inhibition)

Aquatic plants:

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :
NOEC r, 72 h (Pseudokirchneriella subcapitata) : 100 mg/l (Method: OECD Test Guideline 201, growth rate inhibition)

12.2. Persistence and degradability : None.

12.3. Bioaccumulative potential :

Bioaccumulation: Based on the available information, it is not possible to conclude on the hazard potential of this mixture.

12.4. Mobility in soil - Distribution among environmental compartments: No data available.

12.5. Results of PBT and vPvB assessment :

The transition time according to REACH Regulation, Article 23, is still not expired.

12.6. Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment:

Disposal of product: Destroy the product by incineration (in accordance with local and national regulations).

Disposal of packaging: Destroy packaging by incineration at an approved waste disposal site (in accordance with local and national regulations).

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

Safety data sheets: according to Regulation (EC) No. 1907/2006 its amendment (453/2010)

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

15.2. Chemical Safety Assessment: None.

INVENTORIES:

DSL: Conforms to
TSCA: Conforms to
AICS: Conforms to
EINECS: Conforms to
ENCS (JP): Conforms to
ISHL (JP): Conforms to
JEX (JP): Conforms to
KECI (KR): Conforms to
PICCS (PH): Conforms to

16. OTHER INFORMATION

Classification (REGULATION (EC) No 1272/2008):

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

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

R45 May cause cancer.
H304 May be fatal if swallowed and enters airways.

Update:

Safety datasheet sections which have been updated:	Type:
Emergency telephone number	Revisions

Thesaurus:

NOAEL : No Observed Adverse Effect Level (NOAEL)
LOAEL : Lowest Observed Adverse Effect Level (LOAEL)
bw : Body weight
food : oral feed
dw : Dry weight
vPvB : very Persistent and very Bioaccumulative
PBT : Persistent, Bioaccumulative and Toxic

This information applies to the PRODUCT AS SUCH and conforming to specifications of ARKEMA. In case of formulations or mixtures, it is necessary to ascertain that a new danger will not appear. The information contained is based on our knowledge of the product, at the date of publishing and it is given quite sincerely. Users are advised of possible additional hazards when the product is used in applications for which it was not intended. This sheet shall only be used and reproduced for prevention and security purposes. The references to legislative, regulatory and codes of practice documents cannot be considered as exhaustive. It is the responsibility of the person receiving the product to refer to the totality of the official documents concerning the use, the possession and the handling of the product. It is also the responsibility of the handlers of the product to pass on to any subsequent persons who will come into contact with the product (usage, storage, cleaning of containers, other processes) the totality of the information contained within this safety data sheet and necessary for safety at work, the protection of health and the protection of environment.

NB: In this document the numerical separator of the thousands is the "." (point), the decimal separator is "," (comma).