

# NECO GLOBAL INC.

## SAFETY DATA SHEET

Revision Data 12/JUN/2015  
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### 1. PRODUCT AND COMPANY IDENTIFICATION

#### 1.1 Product identifiers

Product name : SODOEX (DME) Organic Degreaser  
Brand : Neco Global  
CAS - No. : 115-10-6

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

Identified uses : Organic degreaser for consumer use,  
Do not use near sources of ignition.

#### 1.3 Details of the supplier of the safety data sheet : Neco Global Air Korea.

The full address : #064-354, Gangnam-daero Yeoksam-dong, Gangnam-gu  
Sesou, Korea.

Telephone : +82-70-4771-9770

Fax : +82-2-6009-9277

E-mail : [info@sodoex.com](mailto:info@sodoex.com)

#### 1.4 Emergency telephone number

Emergency Phone # : +82-10-3438-7575

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance according to Regulation 2008/1272/EC : Aerosol, cat.1, H222, H229

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

#### 2.2 Label elements according to Regulation 2008/1272/EC :



Hazard pictogram(s) :

Singnal word(s) : **Danger**

**Hazard statement(s)** : H222 Extremely flammable aerosol. H229 Pressurised container : May burst if heated.

**Precautionary statement(s)**: P 102 Keep out of reach of children. P 210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P 211 Do not spray on an open flame or other ignition source. P251 Do not pierce or burn, even after use. P 260 Do not breathe spray. P 410+P 412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P 501 Dispose of contents/container to the municipal or sorted waste collection point.

Other usable label elements : no

#### 2.3 Other hazards : Not known

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Synonyms : Dimethyl ether

Formula : C<sub>2</sub>H<sub>6</sub>O

Molecular weight : 46.07 g/mol

CAS-No. : 115-10-6

EC-No. : 204-065-8

#### Hazardous components

Component	Classification	Concentration
Dimethyl ether		
	Flam. Gas 1 ; Press. Gas Liquefied gas ; SA ; H222, H229	<=>99%, Dimethyl ether <=>1% carbon Dioxide(Co2) propellant

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

#### General advice

consult a physician. Show this safeth data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both a acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2)

### 4.3 Indication of any immediate medical attention and special treatment needed.

No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture.

Vapours may form explosive mixtures with air. Vapours may travel to areas away from work site before igniting/flashing back to vapour source. The heat from fire increases inner pressure in containers and can cause their bursting or explosion. The exploding containers could fly up to the distance several ten meters.

### 5.3 Advice for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Clean up promptly by sweeping or vacuum.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid inhalation of vapour or mist.

Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Contents under pressure. Storage class (TRGS 510): Gases

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Dimethyl ether	115-10-6	TWA	1,000.000000 ppm	USA. Workplace Environmental Exposure Levels (WEEL)

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

#### Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Thermal hazards

None when used as directed.

#### Environmental exposure controls

prevent release to the environment.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- a) Appearance Form: Liquefied gas
- b) Odour No data available
- c) Odour Threshold No data available
- d) pH No data available
- e) Melting point/freezing point Melting point/range: -141 °C (-222 °F) - lit.
- f) Initial boiling point and boiling range -24.8 °C (-12.6 °F) - lit.
- g) Flash point -40.99 °C (-41.78 °F) - closed cup
- h) Evaporation rate No data available
- i) Flammability (solid, gas) No data available
- j) Upper/lower Upper explosion limit: 27 %(V)  
flammability or explosive limits Lower explosion limit: 3.4 %(V)
- k) Vapour pressure 5,333 hPa (4,000 mmHg) at 20 °C (68 °F)

- l) Vapour density 1.59 - (Air = 1.0)  
m) Relative density No data available  
n) Water solubility 353 g/l at 24 °C (75 °F) at 1,013 hPa (760 mmHg)  
o) Partition coefficient: noctanol/water No data available  
p) Auto-ignition temperature 226 °C (439 °F) at 1,013 - 1,027 hPa (760 - 770 mmHg)  
q) Decomposition temperature No data available  
r) Viscosity No data available  
s) Explosive properties No data available  
t) Oxidizing properties No data available  
9.2 Other safety information  
Relative vapour density 1.59 - (Air = 1.0)

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

Strong oxidizing agents, Strong acids

### 10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

No data available

LC50 Inhalation - Rat - male - 4 h - 164000 ppm

Remarks: Behavioral:Ataxia. Behavioral:General anesthetic. Behavioral:Coma.

Dermal: No data available

No data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitisation

No data available

#### Germ cell mutagenicity

Ames test

S. typhimurium

Result: negative

Chromosome aberration test in vitro

Human lymphocytes

Result: negative

OECD Test Guideline 477

Drosophila melanogaster - male

Result: negative

#### Carcinogenicity

IARC : No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH : No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP : No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA : No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: PM4780000

Blurred vision, Headache, Dizziness, Convulsions, Asphyxia, Unconsciousness, Liver disorders

## **12. ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

Toxicity to fish semi-static test LC50 - *Poecilia reticulata* (guppy) - > 4.1 g/l - 96 h

Toxicity to daphnia and static test EC50 - *Daphnia magna* (Water flea) - > 4.4 g/l - 48 h

other aquatic invertebrates

Toxicity to bacteria Respiration inhibition EC10 - *Pseudomonas putida* - ca. > 1,600 mg/l - 30 min

### **12.2 Persistence and degradability**

Biodegradability aerobic - Exposure time 28 d

Result: 5 % - Not readily biodegradable.

(OECD Test Guideline 301D)

### **12.3 Bioaccumulative potential**

No data available

### **12.4 Mobility in soil**

No data available

### **12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### **12.6 Other adverse effects**

No data available

## **13. DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods:**

Suitable methods for disposal: (code 200113 - Solvents) incineration in an incinerator or disposing in a collection point for hazardous wastes.

Suitable methods for disposal of the packaging: (code 200140 - Metals) empty packaging dispose in a collection point for sorted wastes or municipal waste.

Physical/chemical properties that may affect waste treatment options: extremely flammable

Sewage disposal : not allowed

Special precautions for recommended waste treatment options (only for disposal of a big amount of substance):

Regarding to the flammability is necessary to dispose it in a well-ventilated area away from sources of ignition.

No smoking.

Directive nr. 98/2008/EC with all amendments.

## **14. TRANSPORT INFORMATION**

DOT (US)

UN number: 1950 Class: 2.1

Proper shipping name: AEROSOLS, flammable gas

Reportable Quantity (RQ):

Poison Inhalation Hazard: No

IMDG

UN number: 1950 Class: 2.1 EMS-No: F-D, S-U

Proper shipping name: AEROSOLS, flammable gas

IATA

UN number: 1950 Class: 2.1

Proper shipping name: AEROSOLS, flammable gas

IATA Passenger: Not permitted for transport

## 15. REGULATORY INFORMATION

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

Commission Regulation nr. 1907/2006/EC (REACH) with all amendments.

Directive nr. 75/324/EEC with all amendments.

Water contaminating class (Germany): WGK 1 slightly water endangering

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out for this substance (Dimethyl Ether).

## 16. OTHER INFORMATION

### 16.1 List of relevant R-phrases and H-phrases, Hazard classes and Category codes listed in the part 3:

R12 Extremely flammable.

H220 Extremely flammable gas. H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated.

Press Gas - Gas under pressure

Flam. Gas 1 - Flammable gas, Hazard Category 1

Aerosol 1 - Aerosol, Hazard Category 1

### 16.2 Instructions for training:

Persons who handle the product shall be instructed about the handling hazards and requirements for the health and environment precaution (see the appropriate provisions of the Labour Code).

Each employer shall in accordance with Article 35 of the Regulation (EC) of the European Parliament and Council No. 1907/2006 provide access to information from the safety data sheet to all personnel who use this product or are exposed to its effects at work, as well as to their representatives.

The information provided in this safety data sheet is supplied in good faith and is accurate at the date of its publication. The information will be updated as and when appropriate. It is not a specification of product nor does it list its uses, for which the label on the packaging should be carefully studied. In compiling the safety data sheet due

16.3 account has been taken of all proper and recommended applications of the product of which we are aware and any user must consult us before applying it to any novel or unusual use. The company accepts no responsibility unless the product is used as recommended.

Sources for compilation of SDS: SDS of Demeon D, ECHA databases

List of used abbreviations:

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road

ECHA: European Chemicals Agency

EMS: Environmental Management System

DOT: Department Of Transports(US)

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Dangerous Goods

IUCLID: International Uniform Chemical Information Database

DNEL: Derived no-effect level  
EC50: Effective concentration for inhibiting 50% of the test organisms  
IC50: Inhibitory Concentration for 50% of test organisms  
LC50: Lethal Concentration for 50% of test organisms  
LD50: Lethal Dose for 50% of test organisms  
LQ: Limited Quantity  
NPK-P: Maximal Permissible Concentration in Working Climate)  
PEL: Permissible Exposure Limit  
PNEC: Predicted no-effect concentration  
RID: Regulations concerning the International Transport of Dangerous Goods by Rail  
SDS: Safety Data Sheet  
STEL: Short Time Exposure Limit  
TWA: Time-Weighted Average

**16.4 Changes to the previous version of the SDS: none**