


**1 Identification**

- **Product identifier**
- **Product name:** NCO Catalyst
- **Relevant identified uses of the substance or mixture and uses advised against**  
 Relevant identified uses :  
 Manufacture of substances:  
 Formulations:  
 Manufacture of paints and varnishes  
 Industrial use:  
 Professional use:  
 Uses advised against:  
 Consumer use:  
 For further information, refer to section 16.
- **Application of the substance / the mixture**  
 For further information, refer to the product technical data sheet.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 Vencorex US, Inc.  
 6213 Highway 332 E  
 Freeport TX 77541  
 USA  
 Tel.: +1 979 238 8660  
 Fax: +1 979 233 3218  
 www.vencorex.com
- **Information department:** productinfo@vencorex.com
- **Emergency telephone number:**  
 FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CONTACT:  
 CHEMTREC 800-424-9300 within the United States or 703-527-3887 for international collect calls.  
 Vencorex Chemtrec Customer Number: CCN227304
- **Chemical Name or Synonym:** Aliphatic polyisocyanate in solution.

**2 Hazard(s) identification**

- **Classification of the substance or mixture**  
 Flam. Liq. 4 H227 Combustible liquid.  
 Acute Tox. 4 H332 Harmful if inhaled.  
 Skin Irrit. 2 H315 Causes skin irritation.  
 Eye Dam. 1 H318 Causes serious eye damage.  
 Skin Sens. 1 H317 May cause an allergic skin reaction.  
 STOT SE 3 H335 May cause respiratory irritation.
- **Label elements**
- **GHS label elements**  
 The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**  
  
 GHS05 GHS07
- **Signal word** Danger
- **Hazard-determining components of labeling:**  
 Hexamethylene diisocyanate oligomers, Isocyanurate  
 Polyoxyethylene tridecyl ether phosphate  
 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate oligomers  
 cyclohexyldimethylamine

# Safety Data Sheet

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**Product name: NCO Catalyst**

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hexamethylene-di-isocyanate

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

- **Hazard statements**

H227 Combustible liquid.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

- **Precautionary statements**

P260 Do not breathe mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Hazard description:**

WARNING! COMBUSTIBLE LIQUID. HARMFUL IF INHALED. MAY CAUSE SKIN, EYE AND RESPIRATORY TRACT IRRITATION. POSSIBLE SENSITIZER. REACTS WITH COMMON MATERIALS INCLUDING WATER, ALCOHOLS, BASES AND AMINES RELEASING LARGE AMOUNTS OF CARBON DIOXIDE.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 2

Reactivity = 1

- **HMIS-ratings (scale 0 - 4)**

HEALTH	2
FIRE	2
REACTIVITY	1

Health = 2

Fire = 2

Reactivity = 1

- **Other hazards**

Combustible liquid.

On contact with water carbon dioxide is released.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical components:**

CAS: 28182-81-2 EC number: 931-274-8	Hexamethylene diisocyanate oligomers, Isocyanurate	≈ 45%
CAS: 53880-05-0 EC number: 931-312-3	3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate oligomers	≈ 20%
CAS: 9046-01-9 Polymer	Polyoxyethylene tridecyl ether phosphate	≈ 7%
CAS: 98-94-2 EINECS: 202-715-5	cyclohexyldimethylamine	< 2%
CAS: 822-06-0 EINECS: 212-485-8	hexamethylene-di-isocyanate	< 0.5%

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CAS: 4098-71-9  
EINECS: 223-861-6

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

&lt; 0.5%

### 4 First-aid measures

- **Description of first aid measures**

- **After inhalation:**

Move the person away from the contaminated area.  
Fresh air and rest.  
Obtain medical attention.  
Show this sheet to the doctor.

- **After skin contact:**

Use appropriate protective equipment when treating a contaminated person.  
Immediately remove any clothing soiled by the product.  
Wash with soap and water.  
Wash immediately and thoroughly for a prolonged period (at least 15 minutes).  
In case of inflammation (redness, irritation, ...) obtain medical attention.  
Place contaminated clothing in a sealed bag for disposal.

- **After eye contact:**

Immediately rinse with plenty of running water for a prolonged period, (at least 15 minutes) while keeping the eyes wide open.  
If irritation persists, consult a doctor.  
Show this sheet to the doctor.

- **After swallowing:**

NEVER attempt to induce vomiting. Rinse mouth out with water.  
Do not give anything to drink.  
If necessary seek medical advice.  
Show this sheet to the doctor.

- **Most important symptoms and effects, both acute and delayed**

No further relevant information available.

- **Danger**

Skin contact may aggravate existing skin disease. Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis.

- **Indication of any immediate medical attention and special treatment needed**

All treatments should be based on observed signs and symptoms of distress in the patient.  
Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.  
Treat symptomatically. No specific antidote available.

### 5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

Foam  
Powders  
Carbon dioxide

- **For safety reasons unsuitable extinguishing agents:** Water

- **Special hazards arising from the substance or mixture**

Combustible.  
During combustion toxic vapors are released.

- **Advice for firefighters**

- **Protective equipment:**

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

- **Additional information**

Stay upwind.  
Evacuate the personnel away from the fumes.

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In case of fire close by:  
Cool down the containers/equipment exposed to heat with a water spray. Ensure that there is NO direct contact between the water and the product.  
Do not breathe fumes.  
Do NOT attempt to fight the fire without suitable protective equipment.  
If there is a fire close by and if packaging has not been damaged:  
Use suitable extinguishers.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin and eyes.  
Do not breathe gas.  
Do NOT approach from DOWNWIND.  
Do NOT attempt to take action WITHOUT suitable protective equipment.  
Self-contained breathing apparatus.  
Full impermeable protective clothing and equipment.  
Mark out the contaminated area with signs and prevent access to unauthorized personnel.

- **Environmental precautions:**

Contain the spilled material by binding.  
Do not allow product to reach sewage system or any water course.

- **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).  
Collect up the product and place it in a spare container suitably labelled.  
Pump up the product into a spare container suitably labelled.  
Wash contaminated area with large amounts of water.  
Recover the cleaning water for subsequent disposal.  
Do not flush to drain. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

- **Reference to other sections**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Precautions for safe handling**

Ensure good ventilation/aspiration at the workplace.  
Avoid contact with water or humidity.  
Avoid any direct contact with the product.  
Any measure to eliminate exposure should be considered.  
Comply with instructions for use (refer to technical sheet).

- **Conditions for safe storage, including any incompatibilities**

- **Storage:**

The floor of the depot should be impermeable and designed to form a water-tight basin.  
Store receptacle in a well ventilated area.  
Store in cool, dry conditions in well sealed receptacles.  
Store only in the original receptacle.

- **Requirements to be met by storerooms and receptacles:**

Product must only be kept in the original packaging.

- Metallic drums.
- Storage tank with a dry nitrogen blanket.

Suitable material for receptacles and pipes: Aluminium.  
Suitable material for receptacles and pipes: steel or stainless steel.  
Unsuitable material for receptacle: Polystyrene.  
Unsuitable material for receptacle: Copper.  
Unsuitable material for receptacle: Tin

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- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

The recommended limits SHOULD NOT be exceeded.

Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting the regulatory requirements. The following limits apply to this material, where, if indicated, S=skin and C=ceiling limit:

#### 4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

REL Short-term value: 0.18 mg/m<sup>3</sup>, 0.02 ppm  
Long-term value: 0.045 mg/m<sup>3</sup>, 0.005 ppm  
Skin

TLV 0.045 mg/m<sup>3</sup>, 0.005 ppm

#### 822-06-0 hexamethylene-di-isocyanate

REL Short-term value: C 0.14\* mg/m<sup>3</sup>, C 0.02\* ppm  
Long-term value: 0.035 mg/m<sup>3</sup>, 0.005 ppm  
\*10-min

TLV 0.034 mg/m<sup>3</sup>, 0.005 ppm

#### 28182-81-2 Hexamethylene diisocyanate oligomers, Isocyanurate

TLV Short-term value: 1 mg/m<sup>3</sup>

- **TLV (Threshold Limit Value established by ACGIH)**

822-06-0	hexamethylene-di-isocyanate	0.005 ppm
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	0.005 ppm

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

822-06-0	hexamethylene-di-isocyanate
4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Ensure good ventilation of the work station.

Shower or take a bath at the end of work.

Separate normal clothes from work-clothes.

Immediately remove all soiled and contaminated clothing.

Safety shower.

Eye wash.

Emergency equipment and first-aid box with instructions readily available.

- **Breathing equipment:**

When using a spray-gun, wear: Self-contained breathing apparatus.

In the event of insufficient ventilation: Self-contained breathing apparatus.

When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

- **Protection of hands:**



Protective gloves

- **Material of gloves**

Rubber gloves

Use suitable chemical-resistant protective gloves.

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The selection of gloves must take into account the extent and duration of use at the workstation. Protective gloves must be chosen according to the function of the work station: other chemicals which may be handled, physical protection necessary (resistance to cutting, puncture, heat), dexterity required.

• **Eye protection:**

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area.



Tightly sealed goggles

- **Body protection:** Protective clothing with elasticated cuffs and closed neck.

### 9 Physical and chemical properties

• **Information on basic physical and chemical properties**

• **General Information**

• **Appearance:**

<b>Form:</b>	Clear Liquid
<b>Color:</b>	Colourless to pale yellow.
<b>Odor:</b>	Characteristic

• **Change in condition**

<b>Melting point/Melting range:</b>	Not applicable.
<b>Boiling point/Boiling range:</b>	Undetermined.

• **Flash point:** 76 °C (169 °F)

• **Density at 25 °C (77 °F):** 1.08 g/cm<sup>3</sup> (9.013 lbs/gal)

• **Solubility in / Miscibility with**

<b>Water:</b>	Reacts.
<b>Ketones:</b>	Soluble
<b>aromatic hydrocarbons:</b>	Soluble
<b>esters :</b>	Soluble

• **Segregation coefficient (n-octanol/water):** Hexamethylene diisocyanate oligomers:  
Not applicable (reacts with water and/or octanol).

• **Viscosity:**

**Dynamic at 25 °C (77 °F):** ≈ 200 mPas

• **Other information**

No further relevant information available.

### 10 Stability and reactivity

• **Reactivity** No further relevant information available.

• **Chemical stability**

• **Thermal decomposition / conditions to be avoided:** Stable at ambient temperature.

• **Possibility of hazardous reactions**

Reacts violently with water.

- alcohols.
- amines.
- bases.
- protic solvents.

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- water and aqueous solutions.

with a great release of CO<sub>2</sub>, and hence a risk of a pressure build-up in confined areas, and forms an insoluble solid precipitate.

- **Conditions to avoid**

extreme heat  
open flame  
moisture  
static electricity  
ignition sources

- **Incompatible materials:** No further relevant information available.

- **Hazardous decomposition products:**

On thermal decomposition (pyrolysis) releases:  
Toxic gases.  
Carbon dioxide  
Nitrogen oxides (NO<sub>x</sub>)

### 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values:**

Harmful by inhalation.

To comply with regulatory guidelines, the substance was tested in a form (i.e. specific particle size distribution) that is different from the form in which the substance is placed on the market and in which it can reasonably be expected to be used. The acute inhalation toxicity of the substance is due to its local action on the distal part of the respiratory tract. As, in the conditions in which the product can reasonably be expected to be used, only a small fraction of the aerosols formed may reach this part of the respiratory tract, a correction has been made to take this difference into consideration. Based on our Expert judgment, the classification Acute inhalation toxicity category 4 is justified.

Not harmful if swallowed.

Not harmful by skin contact.

#### 28182-81-2 Hexamethylene diisocyanate oligomers, Isocyanurate

Oral	LD0	> 2500 mg/kg (rat) (OECD 423 (female))
Dermal	LD0	> 2000 mg/kg (rabbit) (OECD 402)
		> 2000 mg/kg (rat) (OECD 402)
Inhalative	LC50/4h	0.390 mg/l (rat) (OECD 403 (female))

#### 53880-05-0 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate oligomers

Oral	LD50	> 14000 mg/kg (rat) (ASCF, FDA)
Inhalative	LC50/4h	> 5.01 mg/l (rat)
	LOAEC6h	153.4 mg/m <sup>3</sup> (rat) (OECD TG 403)
	NOAEC	50 mg/m <sup>3</sup> (rat)

#### 98-94-2 cyclohexyldimethylamine

Oral	LD50	272 mg/kg (rat)
Dermal	LD50	> 400 mg/kg (rabbit) (402 OCDE)
Inhalative	LC50/4h	4.45 mg/l (rat)

#### 822-06-0 hexamethylene-di-isocyanate

Oral	LD50	746 mg/kg (rat) (OECD 401)
Dermal	LD50	> 7000 mg/kg (rat) (OECD 402)
Inhalative	LC50/4h	0.124 mg/l (rat) (OECD 403)

#### 4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

Oral	LD50	4814 mg/kg (rat) (OECD 401)
Dermal	LD50	> 7000 mg/kg (rat) (OECD 402)

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Inhalative	LC50/4h	0.03 mg/l (rat) (OECD 403)
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- **Primary irritant effect:**
- **on the skin:** Irritating to the skin.
- **on the eye:** Causes serious eye damage.
- **Inhalation:**  
May cause respiratory irritation.

**28182-81-2 Hexamethylene diisocyanate oligomers, Isocyanurate**

Inhalative	NOAEC/6h	3 mg/m <sup>3</sup> (rat) ((OECD TG 403) (TRGS))
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- **Additional toxicological information:**
- **Carcinogenic categories**
- **OSHA-Ca (Occupational Safety & Health Administration)**

Not listed.
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- **Sensitization**

No pulmonary sensitisation was observed in guinea pigs after either intradermal injection or inhalation induction with HDI polyisocyanates.

There is no indication from reports in exposed workers that the substance can cause respiratory sensitisation, if the risk management measures are respected.

May cause sensitisation by skin contact.

- **Carcinogenicity:**

Not considered to be carcinogen.

**822-06-0 hexamethylene-di-isocyanate**

Inhalative	NOAEC Carc	0.164 ppm (rat) (OECD 453)
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- **Mutagenicity:** Product is not considered to be genotoxic.
- **Reproductive toxicity:**  
Is not considered hazardous to the reproduction.

**822-06-0 hexamethylene-di-isocyanate**

Inhalative	NOAEC Dvlp/Tera Tox	0.3 ppm (rat) (OECD 414)
	NOAEC Maternal Tox	0.005 ppm (rat) (OECD 414)
	NOEC Fert	0.3 ppm (rat) (OECD 422)

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:**

According to the data on the components:

The product does not have any known adverse effects on the aquatic organisms tested.

**28182-81-2 Hexamethylene diisocyanate oligomers, Isocyanurate**

EC10/72h (static)	370 mg/l (Desmodesmus subspicatus) (EU C.3)
EL50/48h (static)	127 mg/l (Daphnia magna) (EU C.2)
ErC50(0-72h) (static)	> 1000 mg/l (Desmodesmus subspicatus) (EU C.3)
LL0/96h	≥ 82.8 mg/l (Brachydanio rerio) (EU C.1)

**53880-05-0 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate oligomers**

EC50/3h	> 10000 mg/l (bacteria) (OECD 209 EU method C.11)
EC50/48h	> 3.36 mg/l (Daphnia magna) (OECD 202 EU METHOD C.2)
EC50/72h	> 3.1 mg/l (Desmodesmus subspicatus) (OECD 201 EU method C.3)
LC50/96h (static)	> 1.51 mg/l (fish)
NOEC/72h	3.1 mg/l (Desmodesmus subspicatus) (OECD EU method C.3)

**98-94-2 cyclohexyldimethylamine**

EC50/48h	75 mg/l (Daphnia magna)
EC50/72h	> 2 mg/l (algae) (DIN 38412)

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IC50/96h (static)	>22- < 46 mg/l (fish) (DIN 38412)
<b>822-06-0 hexamethylene-di-isocyanate</b>	
EC0/48h (static)	≥ 89.1 mg/l (Daphnia magna) (EU C.2)
ErC50(0-72h) (static)	> 77.4 mg/l (Desmodesmus subspicatus) (EU C.3)
LC0/96h (static)	≥ 82.8 mg/l (Brachydanio rerio) (EU C.1)
NOEC/72h (static)	11.7 mg/l (Desmodesmus subspicatus) (EU C.3)
<b>4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate</b>	
EC50/48h (static)	27 mg/l (Daphnia magna) (EU C.2, aqua)
ErC50(0-72h) (static)	> 70 mg/l (Desmodesmus subspicatus) (EU C.3 (aqua))
LC50/96h (static)	4 mg/l (Chaetogammarus marinus) (expert judgment, marin) > 72 mg/l (Brachydanio rerio) (EU C.1, aqua)
NOEC/72h (static)	4.4 mg/l (Desmodesmus subspicatus) (EU C.3, aqua)
<b>9046-01-9 Polyoxyethylene tridecyl ether phosphate</b>	
EC50	10 mg/l (Danio rerio)

· **Persistence and degradability**

Oligomers of isophorone diisocyanate:

Not biodegradable.

Hexamethylene diisocyanate oligomers :

Not biodegradable.

Polyoxyethylene tridecyl ether phosphate.

Inherently biodegradable.

<b>28182-81-2 Hexamethylene diisocyanate oligomers, Isocyanurate</b>	
BOD28	1 % (bacteria) ((EU C.4-E) (Unpublished report))
DT50	3 h (Photolysis) ((25 °C) (AOPWIN v1.92) (Internal evaluation)) 7.7 h (Hydrolysis) ((23 °C) (ASTM D4666) (Internal evaluation))
<b>53880-05-0 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate oligomers</b>	
BOD7 (static)	0.5 % (OECD 301 F)
DT50	@ 25 °C 2.7 h (Hydrolysis) (OECD 111)
<b>9046-01-9 Polyoxyethylene tridecyl ether phosphate</b>	
BOD28	45 % (.) (OECD 301B)
BOD28/COD	83 % (.) (OECD 302B)
<b>822-06-0 hexamethylene-di-isocyanate</b>	
BOD28	42 % (bacteria) (EU C.4-D)
DT50	25 °C, 48.44 h (Photolysis) (AOPWIN v1.92) 23 °C, 0.23 h (Hydrolysis) (ASTM D4666)
<b>4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate</b>	
BOD28	0 % (bacteria) (EU C.4-D)
DT50	1.8 d (Photolysis) (AOPWIN v1.90) 0.84 h (Hydrolysis) (23 °C)

· **Behavior in environmental systems:**

· **Bioaccumulative potential**

According to the data on the components:

Not potentially bioaccumulable.

<b>28182-81-2 Hexamethylene diisocyanate oligomers, Isocyanurate</b>	
BCF	3.2 (fish) (BCFWIN v. 2.17)
<b>822-06-0 hexamethylene-di-isocyanate</b>	
BCF	58 (fish) (BCFWIN v.2.17)

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- **Mobility in soil**

**28182-81-2 Hexamethylene diisocyanate oligomers, Isocyanurate**

Log Koc | 7.8 (.) (PCKOC v1.66)

**822-06-0 hexamethylene-di-isocyanate**

Log Koc | 5861 (.) (PCKOC v1.66)

- **Ecotoxicological effects:**

- **Behavior in sewage processing plants:**

**28182-81-2 Hexamethylene diisocyanate oligomers, Isocyanurate**

EC50/3h (static) | 3828 mg/l (activated sludge) (OECD 209)

**822-06-0 hexamethylene-di-isocyanate**

EC50/3h (static) | 842 mg/l (bacteria) (OECD 209)

- **Other information:**

This preparation is classified as :

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

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Discharging waste into rivers and drains is forbidden.

Incinerate at a licensed installation.

Disposal must be made according to federal, state and local regulations.

- **Waste disposal key:** EPA Hazardous Waste - NO

- **Uncleaned packagings:**

Contaminated packaging materials must be disposed of in the same manner as the product.

- **Recommendation:**

Allow it to drain thoroughly.

Thoroughly emptied and clean packagings may be recycled.

Disposal must be made according to official regulations.

### 14 Transport information

- **UN Number** NOT regulated.

- **DOT, ADR, ADN, IMDG, IATA** -

- **Proper shipping name (Technical Name)** NOT regulated.

- **DOT, ADR, ADN, IMDG, IATA** -

- **Transport hazard class(es)** NOT regulated.

- **DOT, ADR, ADN**

- **Class** -

- **IMDG, IATA**

- **Class** -

Not regulated.

- **Packing group**

- **DOT, ADR, IMDG, IATA** -

- **Environmental hazards:** Not applicable.

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· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	The above regulatory prescriptions are those valid on the date of publication of this sheet. However, given the possible evolution of transport regulations for hazardous materials and in the event of the SDS in your possession dating back more than 12 months, it is advisable to check their validity with your sales office.

### 15 Regulatory information

- **National legislation**
- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara Section 312**  
Fire Hazard - Yes  
Reactive Hazard - NO  
Release of Pressure - NO  
Acute Health Hazard - YES  
Chronic Health Hazard - YES

- **Section 355 (extremely hazardous substances):**

4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
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- **Section 313 (Specific toxic chemical listings):**

CERCLA RQ 100 lbs for 822-06-0  
SARA EHS TPQ 500 lbs for 4098-71-9

822-06-0	hexamethylene-di-isocyanate
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4098-71-9	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
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- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

Not listed.

- **IARC (International Agency for Research on Cancer)**

Not listed.

- **NTP (National Toxicology Program)**

Not listed.

- **Inventory status:**

- **Australian Inventory of Chemical Substances (AICS)**

All ingredients are listed.

- **Canadian Domestic Substance List (DSL)**

All ingredients are listed.

- **Canadian Non Domestic Substance List (NDSL)**

Not listed.

- **Chinese Chemical Inventory of Existing Chemical Substances (CIECS)**

All ingredients are listed.

- **European EINECS/ELINCS Listing**

All ingredients are listed.

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USA

**Safety Data Sheet  
acc. to OSHA HCS**

08/01/2018

Version: 7

Reviewed on 08/01/2018

**Product name: NCO Catalyst**

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· **Japan Existing and New chemical Substance List (ENCS)**

All ingredients are listed.

· **Korea Existing Chemical Inventory (KECI)**

All ingredients are listed.

· **Philippines Inventory of Chemicals and Chemical Substances (PICCS)**

All ingredients are listed.

· **TSCA listing**

All ingredients are listed.

· **Other regulations, limitations and prohibitive regulations**

· **State of California, Proposition 65:**

· **Chemicals known to cause cancer:**

Not listed.

· **Chemicals known to cause reproductive toxicity for females:**

Not listed.

· **Chemicals known to cause reproductive toxicity for males:**

Not listed.

· **Chemicals known to cause developmental toxicity:**

Not listed.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Service HSE Vencorex
- **Date of preparation / last revision** 08/01/2018 / 6
- \* **Data compared to the previous version altered.**

USA