Safety Data Sheet NOVACOTE SF-7660

Safety Data Sheet dated: 9/26/2016 - version 2

Date of first edition: 9/6/2016



SECTION 1: Identification

Product Identifier

Mixture identification:

Trade name: NOVACOTE SF-7660 Trade code: NOVACOTE SF-7660

Registration Number N/A

Recommended use of the chemical and restrictions on use

Recommended use: polyester polyol

Uses advised against: N.A.

Supplier's details

Company: COIM Asia Pacific Pte Ltd

10 Seraya Place Singapore 627843 Tel: +65 68967068 Fax: +65 68967065

Emergency phone number

+65 68967068 (24hrs)

SECTION 2: Hazards identification

Classification of the substance or mixture

This product is not dangerous according to Singapore GHS (SS 586, revision 2014).

Adverse physicochemical, human health and environmental effects:

No other hazards

GHS label elements, including precautionary statements

This product is not dangerous according to Singapore GHS (SS 586, revision 2014).

Other hazards which do not result in a classification

Other Hazards: No other hazards

SECTION 3:Composition/information on ingredients

Substances

N.A.

Mixtures

Mixture identification: NOVACOTE SF-7660

List of components

 Quantity
 Name
 Ident. Numb.

 1-5 %
 2,2'-oxydiethanol
 CAS:111-46-6 EC:203-872-2

EC:203-872-2 Index:603-140-00-6

SECTION 4: First-aid measures

Description of necessary first-aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eye contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

N.A.

Indication of immediate medical attention and special treatment needed, if necessary

SECTION 5: Fire-fighting measures Suitable extinguishing media

Date 9/26/2016 Production Name NOVACOTE SF-7660 Page n. 1 of 6

Water.

Carbon dioxide (CO2).

Unsuitable extinguishing media:

Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke. Hazardous combustion products: N.A.

Explosive properties: N.A. Oxidizing properties: N.A.

Special protective actions for fire-fighters

Fire-fighters should wear positive pressure self-contained breathing apparatus and personal protective equipments, such as jacket (standard: EN469), helmet (standard: EN443), gloves (standard: EN407), boots (standard: EN345-S3 HI WRU HRO).

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorb with inert, absorbent material.

Methods and material for containment and cleaning up

Suitable material for taking up: absorb with inert, absorbent material.

In case of heavy spills: wash with plenty of water.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes, inhaltion of vapours and mists.

Do not eat or drink or smoke while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Store at moderate temperature in a dry and well-ventilated place

Incompatible materials:

See Section 10.

Instructions as regards storage premises:

Adequately ventilated premises.

SECTION 8: Exposure controls/personal protection

Control parameters

List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm Behaviour	Note
2,2'-oxydiethanol	NATIONA L	GERMANY		44.000	10.000	176.000	40.000	AGS, DFD
	NATIONA L	UNITED KINGDOM		101.000	23.000			WEL
	NATIONA L	AUSTRALIA		100.000	23.000			SWA
	NATIONA L	AUSTRIA		44.000	10.000	176.000	40.000	MAK
	NATIONA L	DENMARK		11.000	2.500	22.000	5.000	
	NATIONA L	IRELAND		100.000	23.000			
	NATIONA L	LATVIA		10.000				
	NATIONA L	NEW ZEALAND		101.000	23.000			
	NATIONA L	SWEDEN		45.000	10.000	90.000	20.000	
	NATIONA L	SWITZERLAND		44.000	10.000	176.000	40.000	

Predicted No Effect Concentration (PNEC) values

Date 9/26/2016 Production Name NOVACOTE SF-7660 Page n. 2 of 6

Component CAS-No. PNEC Exposure Route Exposure Frequency Remark LIMIT

2,2'-oxydiethanol 111-46-6 10.000 Fresh Water

mg/l

1.000 mg/l Marine water Sediment

20.900 mg/kg

1.530 Soil (agricultural) mg/kg

mg/kg 10.000 mg/l

10.000 STP

199.500

Aquatic Intermittent release

Derived No Effect Level. (DNEL)

Component CAS-No. Worker Worker Consumer Exposure **Exposure Frequency** Remark Professional Route Industry 53.000 mg/kg 2,2'-oxydiethanol 111-46-6 106.000 mg/kg Human Dermal Long Term, systemic effects 0.060 mg/l 0.012 mg/l Human Dermal Long Term, local effects

Appropriate engineering controls

N.A.

Individual protection measures, such as personal protective equipment (PPE)

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

N.A.

SECTION 9: Physical and chemical properties

Physical State: Liquid

Appearance and colour: colorless-amber

Odour: odourless
Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: >250°C Evaporation rate: N.A. Flammability (Solid, Gas) N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour pressure: N.A. Vapour density (air = 1): N.A. Density: 1.19 g/cm3 Notes: (20°C) Solubility in water: Insoluble Solubility in oil: Soluble

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A. Decomposition temperature: N.A. Viscosity: 6000-10000cps at 25°C

Other information

Substance Groups relevant properties N.A.

Miscibility: N.A. Conductivity: N.A.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions.

Chemical stability

Data not Available.

Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

Stable under normal conditions.

Date 9/26/2016 Production Name NOVACOTE SF-7660 Page n. 3 of 6

Incompatible materials

None in particular.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous reactions will not occur.

SECTION 11: Toxicological information

Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

2,2'-oxydiethanol

Generic information:

None specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

4 h

a) acute toxicity

LD50 Oral Rat 19600.00000mg/kg

LD50 Skin Rabbit 13300.0000mg/kg

LC50 Inhalation Rat > 4.60000mg/l

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

a) acute toxicity

b) skin corrosion/irritation

c) serious eye damage/irritation

d) respiratory or skin sensitisation

e) germ cell mutagenicity

f) carcinogenicity

g) reproductive toxicity

h) STOT-single exposure

i) STOT-repeated exposure

j) aspiration hazard

SECTION 12: Ecological information

Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of components with eco-toxicological properties

Component Ident. Numb. Ecotox Infos

Diethylene glycol (DEG) CAS: 111-46-6 - EINECS: 203-872-2 -

67-548-EC: 603-140-00-6 LC50 a) Aquatic acute toxicity Fish Pimephales promelas 75200.0000 mg/L 96h

EC50 a) Aquatic acute toxicity Daphnia Daphnia magna> 10000mg/L 24 h

IC50 a) Aquatic acute toxicity Algae > 100.00000mg/L 72h

Persistence and degradability

 Component
 Persitence/Degradability:

 Diethylene glycol (DEG)
 Readily biodegradable

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

SECTION 13: Disposal considerations

Disposal methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

The product is not regulated under international transport regulations.

Date 9/26/2016 Production Name NOVACOTE SF-7660 Page n. 4 of 6

UN number

N.A.

UN proper shipping name

N.A.

Transport hazard class(es)

N.A.

Packing group, if applicable

N.A.

Environmental hazards

N.A.

Special precautions for user

N.A.

Road and Rail (ADR-RID):

N.A.

Air (IATA):

N.A.

Sea (IMDG):

N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A

SECTION 15: Safety, health and environmental regulations specific for the product in question This Safety Data Sheet has been prepared according to:

SS 586 : Part 1 (2014) SS 586 : Part 2 (2014) SS 586 : Part 3 (2014)

SECTION 16: Other information

Code Description
H302 Harmful if swallowed.

H373.2 May cause damage to organs through prolonged or repeated exposure.

Key/legend to the abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists

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

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

BCF: Biological Concentration Factor BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive DSD: Dangerous Substances Directive EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

 Date
 9/26/2016
 Production Name
 NOVACOTE SF-7660
 Page n. 5 of 6

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods. INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Instituto de Hospitalización y Asistencia de Carácter Científico

KAFH: Keep away from heat KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LDLo: Leathal Dose Low N.A.: Not Applicable N/A: Not Applicable

N/D: Not defined/ Not available

NA: Not available

NEN1: ND: National emergency telephone number: not available NEN2: ND: National emergency telephone number: not available NIOSH: National Institute for Occupational Safety and Health

NOAEL: No Observed Adverse Effect Level

OSHA: Occupational Safety and Health Administration.

PBT: Persistent, Bioaccumulative and Toxic

PGK: Packaging Instruction

PNEC: Predicted No Effect Concentration.

PSG: Passengers

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STEL: Short Term Exposure limit. STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

vPvB: Very Persistent, Very Bioaccumulative.

WGK: German Water Hazard Class.

Date of revision of this SDS

Safety Data Sheet dated: 9/26/2016 - version 2

Paragraphs modified from the previous revision:

- 9. PHYSICAL AND CHEMICAL PROPERTIES

 Date
 9/26/2016
 Production Name
 NOVACOTE SF-7660
 Page n. 6 of 6