

Safety Data Sheet
According to 1272/2008/EC (CLP)

Printing Date: 26.08.2015

Version Number: 1.0

Revision Date: 26.08.2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Trade name: HA Flex SLV AF

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

Waterproofing.

Identified uses advised against: No further relevant information available.

1.3 Details of the supplier of the safety data sheet:

Manufacturer/supplier:

De Neef Construction Chemicals BVBA
Industriepark 8,
2220 Heist-op-den-Berg,
Belgium.

Tel: +32 15 24 93 60

Fax: +32 15 24 80 72

www.graceconstruction.com**Further information obtainable from:** conchem@deneef.com

1.4 Emergency telephone number:

+44 (0)1235 239 670 (Multi-lingual – 24 Hours)

+44 (0)1235 239 671 (Dedicated phone line for Arabic speaking countries - 24 Hours)

EHS Department, Cikarang, Indonesia - Tel. No.: - (62-21) 893-4260

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4	H332	Harmful if inhaled.
Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
Resp. Sens. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1	H317	May cause an allergic skin reaction.
Carc. 2	H351	Suspected of causing cancer.
STOT SE 3	H335-H336	May cause respiratory irritation. May cause drowsiness or dizziness.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

GB

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(Contd. of page 1)

Hazard pictograms

GHS07 GHS08

Signal word Danger**Hazard-determining components of labelling:**

Methylenediphenyl diisocyanate, mixture of isomers
Diphenylmethane-4,4'-di-isocyanate

Hazard statements

H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 [In case of inadequate ventilation] wear respiratory protection.
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 water.
P337+P313 If eye irritation persists: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Additional information:

Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards:**Results of PBT and vPvB assessment:****PBT:** Not applicable.**vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****3.2 Chemical characterization: Mixtures:****Description:** Mixture of substances listed below with non-hazardous additions.**Dangerous components:**

CAS: 26447-40-5 EINECS: 247-714-0 Index number: 615-005-00-9	Methylenediphenyl diisocyanate, mixture of isomers ----- Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373 Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	20-25%
CAS: 101-68-8 EINECS: 202-966-0 Index number: 615-005-00-9	Diphenylmethane-4,4'-di-isocyanate ----- Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373 Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	1,0-2,0%

(Contd. on page 3)

GB

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(Contd. of page 2)

Additional information: For the wording of the listed risk phrases refer to section 16.**SECTION 4: First aid measures****4.1 Description of first aid measures:****General information:** Get medical advice/attention if you feel unwell.**After inhalation:** No special measures required.**After skin contact:** Wash with plenty of soap and water.**After eye contact:** Rinse cautiously with water for several minutes.**After swallowing:**

Rinse mouth.

Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed:

May cause sensitisation by skin contact.

Irritating to eyes.

4.3 Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media:****Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray.**5.2 Special hazards arising from the substance or mixture:** No further relevant information available.**5.3 Advice for firefighters:****Protective equipment:** Wear self-contained respiratory protective device.**Additional information:** Collect contaminated fire fighting water separately. It must not enter the sewage system.**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation.

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up:

Send for recovery or disposal in suitable receptacles.

Dispose contaminated material as waste according to item 13.

(Contd. on page 4)

GB

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Trade name: HA Flex SLV AF

(Contd. of page 3)

6.4 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.

SECTION 7: Handling and storage**7.1 Precautions for safe handling:**

Prevent formation of aerosols.

Avoid contact with skin.

Avoid contact with eyes.

Do not eat, drink or smoke when using this product.

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

Keep only in original container.

Use only outdoors or in a well-ventilated area.

Information about fire - and explosion protection: No special measures required.**7.2 Conditions for safe storage, including any incompatibilities:****STORAGE****Information about storage in one common storage facility:** No special measures required.**Further information about storage conditions:**

Protect from frost.

Store in a dry place.

Keep cool.

7.3 Specific end use(s): No further relevant information available.**SECTION 8: Exposure controls/personal protection****Additional information about design of technical facilities:** No further data; see item 7.**8.1 Control parameters:****Ingredients with limit values that require monitoring at the workplace:****101-68-8 Diphenylmethane-4,4'-di-isocyanate**

WEL (Great Britain)	Short-term value: 0,07 mg/m ³ Long-term value: 0,02 mg/m ³ Sen; as -NCO
PEL (USA)	Ceiling limit: 0,2 mg/m ³ , 0,02 ppm
REL (USA)	Long-term value: 0,05 mg/m ³ , 0,005 ppm Ceiling limit: 0,2* mg/m ³ , 0,02* ppm *10-min
TLV (USA)	Long-term value: 0,051 mg/m ³ , 0,005 ppm

(Contd. on page 5)

GB

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(Contd. of page 4)

DNELs**101-68-8 Diphenylmethane-4,4'-di-isocyanate**

Oral	DNEL short term syst.	20 mg/kg bw/d (general population)
Dermal	DNEL acute local eff	17,2 mg/cm ² (general population) 28,7 mg/cm ² (workers)
	DNEL short term syst.	25 mg/kg bw/d (general population) 50 mg/kg bw/d (workers)
Inhalative	DNEL long term syst.	0,025 mg/m ³ (general population) 0,05 mg/m ³ (workers)
	DNEL short term syst.	0,05 mg/m ³ (general population)

PNECs**101-68-8 Diphenylmethane-4,4'-di-isocyanate**

PNEC STP	1 mg/l (-)
PNEC freshwater	1 mg/l (-)
PNEC marine water	0,1 mg/l (-)

Additional information: Based on the lists valid at the date of MSDS creation.

8.2 Exposure controls:**PERSONAL PROTECTIVE EQUIPMENT****General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands: Protective gloves.

Material of gloves: Rubber gloves.

Penetration time of glove material:

The exact breakthrough time has to be determined by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Safety glasses with side shield protection.



A face shield should also be worn if there is potential exposure to splash or spray.

Body protection:

Use personal protective equipment as required.

(Contd. on page 6)

GB

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Trade name: *HA Flex SLV AF*

(Contd. of page 5)

Take off contaminated clothing.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties:****GENERAL INFORMATION****Appearance:**

Form:	Liquid.
Colour:	According to product specification.
Odour:	Characteristic.
Odour threshold:	Not determined.

pH-value (~): Not determined.

Change in conditions:-

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	> 100 °C
Flash point:	> 100 °C

Flammability (solid, gaseous): Not applicable.

Decomposition temperature:	Not determined.
Self-igniting:	Product is not self-igniting.
Danger of explosion:	Product does not present an explosion hazard.

EXPLOSION LIMITS

Lower:	Not determined.
Upper:	Not determined.
VOC Content:	Not determined.

Vapour pressure:	Not determined.
Density:	Not determined.
Relative density:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.

Solubility in/Miscibility with:-
Water: Not miscible or difficult to mix.

Partition coefficient (n-octanol/water): Not determined.

VISCOSITY

Dynamic:	Not determined.
Kinematic:	Not determined.
Molecular weight	Not applicable.

9.2 Other information: No further relevant information available.**SECTION 10: Stability and reactivity****10.1 Reactivity:** Stable under normal conditions.**10.2 Chemical stability:****Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.**10.3 Possibility of hazardous reactions**

Reacts with water.

(Contd. on page 7)

GB

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(Contd. of page 6)

Reacts with oxidising agents.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

ACUTE TOXICITY

Harmful if inhaled.

LD/LC50 values relevant for classification:

101-68-8 Diphenylmethane-4,4'-di-isocyanate

Oral	LD50	> 10000 mg/kg (rat)
Dermal	LD50	> 9400 mg/kg (rabbit)
Inhalative	LC50, 4h	0,49 mg/l (rat)

Primary irritant effect:-

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation. May cause drowsiness or dizziness.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity:

AQUATIC TOXICITY No further relevant information available.

12.2 Persistence and degradability: No further relevant information available.

12.3 Bioaccumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

(Contd. on page 8)

GB

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Trade name: *HA Flex SLV AF*

(Contd. of page 7)

ADDITIONAL ECOLOGICAL INFORMATION

General notes: Not known to be hazardous to water.

12.5 Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects: No further relevant information available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods:**

Recommendation:



Must not be disposed together with household garbage. Do not allow product to reach sewage system.

UNCLEANED PACKAGING

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information**14.1 UN-Number**

ADR, ADN, IMDG, IATA

Not Regulated

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA

Not Regulated

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA

Class

Not Regulated

14.4 Packing group

ADR, IMDG, IATA

Not Regulated

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user:

Not Regulated

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

Not Regulated

UN "Model Regulation":

Not regulated for transport.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

See Section 2 for hazard identification.

(Contd. on page 9)

GB

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(Contd. of page 8)

National regulations:**Other regulations, limitations and prohibitive regulations:** All components EINECS listed or exempt.**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**SECTION 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.

Relevant phrases:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

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

Department issuing MSDS:

EHS Department,

Asia Pacific Region

Grace Construction Products

SCIP, Canlubang, Calamba City, Laguna

Philippines 4028

Tel: ++63 (02) 884-0300, Fax: ++63 (49) 549-7778

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GB