

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

#### 1.1. Product identifier

Product form : Mixture  
 Product name : NITOHARD AS-3000  
 Product code : NHDEREAS3000  
 Type of product : Rubberbased material  
 Product group : MFG

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use  
 Use of the substance/mixture : Reinforcement for body of automobile

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

NITTO BELGIUM NV  
 Eikelaarstraat 22  
 3600 Genk - België  
 T +32 (0)89 360 111 - F +32 89 362 242  
[Regulatory\\_Affairs@nittoeur.com](mailto:Regulatory_Affairs@nittoeur.com) - [www.nitto.com](http://www.nitto.com)

#### 1.4. Emergency telephone number

Emergency number : +32 (0)89 360 585  
 This emergency number is only available during office hours (9am to 5pm CET).

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2	H315	Berekeningsmethode
Serious eye damage/eye irritation, Category 2	H319	Beoordeling door deskundigen
Sensitisation — Skin, Category 1	H317	Berekeningsmethode
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411	Berekeningsmethode

Full text of H statements : see section 16

##### Adverse physicochemical, human health and environmental effects

Irritating to eyes. Irritating to skin. May cause sensitisation of susceptible persons by skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



CLP Signal word :

Warning

Hazardous ingredients :

4-[4-(hydrazinesulfonyl)phenoxy]benzenesulfonylhydrazide; di(benzothiazol-2-yl) disulphide; 2,2'-[(1-methylethylidene)bis(cyclohexaan-4,1-diyloxymethyleen)]bisoxiran; fatty acids, C18-unsatd., dimers, polymers with bisphenol A and epichlorohydrin

Hazard statements (CLP) :

H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H319 - Causes serious eye irritation

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Precautionary statements (CLP)	: H411 - Toxic to aquatic life with long lasting effects : P261 - Avoid breathing dust/fume/gas/mist/vapours P264 - Wash hands thoroughly after handling P272 - Contaminated work clothing should not be allowed out of the workplace P273 - Avoid release to the environment P280 - Wear protective gloves P302+P352 - IF ON SKIN: Wash with plenty of water P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P321 - Specific treatment (see a doctor on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P333+P313 - If skin irritation or rash occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P391 - Collect spillage P501 - Dispose of contents/container in accordance with local/regional/national/international regulations
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### 2.3. Other hazards

Other hazards not contributing to the classification : During the polymerisation process (when heated) hazardous gasses and fumes are emitted in small concentrations: carbon sulfide, hydrogensulfide, benzothiazole and other aromatic hydrocarbons.

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
fatty acids, C18-unsatd., dimers, polymers with bisphenol A and epichlorohydrin	(CAS No) 67989-52-0 (EC no) 500-180-5	5 - 19	Xi; R36/38 R43	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
zinc oxide	(CAS No) 1314-13-2 (EC no) 215-222-5 (EC index no) 030-013-00-7	1 - 5	N; R50/53	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
di(benzothiazol-2-yl) disulphide	(CAS No) 120-78-5 (EC no) 204-424-9 (EC index no) 613-135-00-0 (REACH-no) 01-2119489366-24	1 - 5	R31 R43 N; R50/53	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
sulphur	(CAS No) 7704-34-9 (EC no) 231-722-6 (EC index no) 016-094-00-1 (REACH-no) 01-2119487295-27	1 - 5	Xi; R38	Skin Irrit. 2, H315

Full text of R- and H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: No special requirements necessary, if handled at room temperature.
First-aid measures after inhalation	: No fumes and gasses are formed during storage or transport. When the product is heated hazardous gasses and fumes can be formed. So when exposed, remove to fresh air.
First-aid measures after skin contact	: Individuals who show symptoms of an allergic reaction or sensitization  should seek medical attention and should avoid further contact with this product.
First-aid measures after eye contact	: Remove immediately all sticky substance. Rinse cautiously with water for several minutes.
First-aid measures after ingestion	: Do not induce vomiting without medical advice.

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

Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Repeated or prolonged contact may cause slight irritation to the skin.
Symptoms/injuries after eye contact	: May cause irritation to the eyes in some people.
Symptoms/injuries after ingestion	: No specific symptoms are known or reported.
Symptoms/injuries upon intravenous administration	: No specific symptoms are known or reported.

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Chronic symptoms : No specific symptoms are known or reported.

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

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : All extinguishing media can be used.

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

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard.

### 5.3. Advice for firefighters

Precautionary measures fire : On heating/burning: release of hazardous gases/vapours (carbon monoxide - carbon dioxide).

Firefighting instructions : Personal precautions, protective equipment and emergency procedures.

## SECTION 6: Accidental release measures

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

General measures : Recover material and dispose into suitable container.

#### 6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment. Keep unprotected persons away from the danger zone.

Emergency procedures : When a incident occurs within the premises of the company, please follow the predefined procedure.

#### 6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : When a incident occurs within the premises of the company, please follow the predefined procedure.

### 6.2. Environmental precautions

Collect all waste in suitable and labelled containers and dispose according to local legislation.

### 6.3. Methods and material for containment and cleaning up

For containment : Allow reaction to complete. Place in an appropriate container and dispose of the contaminated material at a licensed site.

Other information : Dispose as hazardous waste.

### 6.4. Reference to other sections

Reference to other sections (8, 13).

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : During the process the emission of volatile gasses and fumes are known.

Precautions for safe handling : Closed system, ventilation. Provide adequate ventilation to minimize dust and/or vapour concentrations. Wear suitable respiratory equipment in case of insufficient ventilation.

Handling temperature : 20 - 35 °C

Hygiene measures : Do not eat and drink on the workfloor.

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

Technical measures : Both local exhaust and general room ventilation are usually required.

Storage conditions : Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

Incompatible products : Not applicable.

Maximum storage period : 4 months from date of manufacturing of the product

Storage temperature : 0 - 10 °C

Storage area : Protect against frost. Store in a dry area.

Packaging materials : Keep the product in the original packaging for storage.

### 7.3. Specific end use(s)

Reinforcement for body of automobile.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

NITOHARD AS-3000		
EU	IOELV TWA (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> carbondisulfide 7 mg/m <sup>3</sup> hydrogensulfide

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EU	IOELV STEL (mg/m <sup>3</sup> )	14 mg/m <sup>3</sup> hydrogensulfide
Belgium	Remark (BE)	benzothiazole

### 8.2. Exposure controls

Appropriate engineering controls	: Closed system, ventilation.
Materials for protective clothing	: No data available
Hand protection	: Wear suitable gloves resistant to chemical penetration
Eye protection	: Not applicable
Skin and body protection	: Long sleeved protective clothing
Respiratory protection	: Wear suitable respiratory equipment in case of insufficient ventilation



Thermal hazard protection	: While handling the reacted and warm product the appropriate gloves have to be worn.
Environmental exposure controls	: Recover the reacted material and dispose it in suitable container. Dispose in accordance with the federal and local regulation.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: solid in various forms.
Colour	: black to grey-black.
Odour	: Rubber-like odour.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

During the polymerisation process (when heated) hazardous gasses and fumes are emitted in small concentrations: carbon sulfide, hydrogensulfide, benzothiazole and other aromatic hydrocarbons.

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### 10.2. Chemical stability

Stable at room temperature.

### 10.3. Possibility of hazardous reactions

The heated product starts to vulkanize.

### 10.4. Conditions to avoid

Avoid unintentional heating of the product.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Overheating may liberate volatile compounds.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	: Not classified (Lack of data)
Skin corrosion/irritation	: Causes skin irritation. (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Causes serious eye irritation. (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	: May cause an allergic skin reaction. (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Lack of data)
Carcinogenicity	: Not classified (Lack of data)
Reproductive toxicity	: Not classified (Lack of data)
Specific target organ toxicity (single exposure)	: Not classified (Lack of data)
Specific target organ toxicity (repeated exposure)	: Not classified (Lack of data)
Aspiration hazard	: Not classified (Lack of data)
Potential adverse human health effects and symptoms	: Irritating to eyes and skin. May cause sensitisation by skin contact.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Contains environmentally dangerous component(s).

### 12.2. Persistence and degradability

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Persistence and degradability	Biodegradability in soil: no data available.
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### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations	: The product has to be recycled and destroyed according to national and local legislation.
Additional information	: Non hazardous waste (91/689/EEC).
European List of Waste (LoW) code	: 07 02 13 - waste plastic

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No. (ADR) : Not applicable

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UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable
UN-No. (ADN)	: Not applicable
UN-No. (RID)	: Not applicable

### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : Not applicable  
:



#### IMDG

Transport hazard class(es) (IMDG) : Not applicable  
:



#### IATA

Transport hazard class(es) (IATA) : Not applicable  
:



#### ADN

Transport hazard class(es) (ADN) : Not applicable  
:



#### RID

Transport hazard class(es) (RID) : Not applicable  
:



### 14.4. Packing group

Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable

### 14.5. Environmental hazards

Dangerous for the environment	: Yes
Marine pollutant	: Yes

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Other information : No supplementary information available

### 14.6. Special precautions for user

Special transport precautions : No particular/specific measures required

#### - Overland transport

No data available

#### - Transport by sea

No data available

#### - Air transport

No data available

#### - Inland waterway transport

No data available

#### - Rail transport

No data available

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

#### 15.1.2. National regulations

##### Germany

VwVwS Annex reference : Water hazard class (WGK) 2, hazard to waters (Classification according to VwVwS, Annex 4)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

##### Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product  
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

### 15.2. Chemical safety assessment

**For the following substances of this mixture a chemical safety assessment has been carried out**

di(benzothiazol-2-yl) disulphide

## SECTION 16: Other information

Indication of changes:

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Full text of R-, H- and EUH-statements:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, Category 1
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
R31	Contact with acids liberates toxic gas
R36/38	Irritating to eyes and skin
R38	Irritating to skin
R43	May cause sensitisation by skin contact
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
N	Dangerous for the environment
Xi	Irritant

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Skin Irrit. 2	H315	Berekeningsmethode
Eye Irrit. 2	H319	Beoordeling door deskundigen
Skin Sens. 1	H317	Berekeningsmethode
Aquatic Chronic 2	H411	Berekeningsmethode

SDS EU (REACH Annex II)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*