### SAFETY DATA SHEET



### Novamid® ID1070

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

1.1 Product identifier

**Product name** : Novamid® ID1070 Internal code : WW59213 **Chemical formula** : Not applicable.

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

Recommended use : plastic products

1.3 Details of the supplier of the safety data sheet

: DSM Engineering Plastics Europe Supplier

The Front Tower Shiba Koen, 6 - 8th Floor P.O. Box 1077

**DSM Japan Engineering Plastics** 

6160 BB Geleen 2-6-3, Shiba Koen

The Netherlands Minato-ku, Tokyo 105-0011

T: +31-(0)46-7506500 Janan

T: +81-3-5404-8340

**DSM Engineering Plastics Americas** DSM Engineering Plastics India Pvt Ltd

F 40 MIDC Industrial Area 2267 W. Mill Road

Evansville, IN 47720 Ranjangaon

USA Pune 412220 T: +1-812-435-7500 India

T: +91-2138671901

DSM Engineering Plastics Asia Pacific DSM South America Ltda.

476 Li Bing Rd, ZhangJiang High-Tech Park Rua Doutor Ulisses Guimarães, 504 Loteamento Industrial Coral, Sertãozinho, Mauá-Pudong

Shanghai, 201203 SP

CEP: 09372-050 P.R.China

T: +86-510-86198228 Brasil T: +55-11-3760-6411

**DSM Engineering Plastics Korea** TAI-YOUNG NYLON CO., LTD.

No.1002, Michuhol Tower No. 25, Ta-Yeh St., Ta-Liau Dist., Kaohsiung City

831-62 Taiwan, R.O.C. #12, Gaetboel-ro, Yeonsu-gu, Incheon, 406-740, Korea T: +886-7-7872251

e-mail address of person responsible for this SDS

: Info.Worldwise@dsm.com

T: +82-32-260-3400

1.4 Emergency telephone number

**Emergency telephone** : The Netherlands: +31 (0)46 476 55 55

number

### SECTION 2: Hazards identification

2.1 Classification of the substance or mixture : Mixture

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

Not classified.

**Product definition** 

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Remarks : Hazard of slipping on spilt product. Heated material can cause thermal burns. Electrostatic

charging can occur during unloading or processing of this material. If necessary take precautionary measures against static discharges. The likelihood of adverse health effects arising from normal use of the product is considered very low. Appropriate precautions should be taken if the product is subjected to secondary processing. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Dust may cause mechanical

irritation

2.2 Label elements

Hazard pictograms

Date of issue/Date of revision: 19 February 2016 Version: 1 Page: 1/9



Signal word : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

Supplemental label

elements

: Not applicable.

**Precautionary statements** 

Prevention: Not applicable.Response: Not applicable.Storage: Not applicable.Disposal: Not applicable.

Hazardous ingredients

2.3 Other hazards

Other hazards which do not result in classification

: Heated material can cause thermal burns.

## SECTION 3: Composition/information on ingredients

3.1 Substances / 3.2 Mixtures : Mixture

Chemical description : Base polymer: Polyamide 6; CAS no. 25038-54-4

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Remarks

: The components of this product are embedded in an impervious polymer matrix and are therefore not biologically available. Any hazardous constituents are fixed in the polymer matrix and therefore present a negligible exposure risk under normal conditions of processing and handling. Additives contained in this product do not pose a risk to health unless they are liberated during processing (fumes from melting, dusts). Suitable Industrial Hygiene precautions should be implemented to prevent (respirable) dust and fume exposures. Exposure to (melting) fumes should be kept as low as possible, using suitable ventilation equipment. Dusts and fumes created from secondary processing may be irritating to respiratory tract and skin and should be considered as potentially hazardous. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### SECTION 4: First aid measures

### 4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.

Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical

attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48

hours.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get

 $\label{eq:medical} \mbox{medical attention if symptoms occur.} \ \ \mbox{Do not remove clothing adhering to skin.}$ 

Ingestion : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position

comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel.

Get medical attention if symptoms occur.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

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

### Potential acute health effects

**Eye contact**: No known significant effects or critical hazards.

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be

delayed following exposure.

**Skin contact** : Heated material can cause thermal burns resulting in pain, redness, blistering.

**Ingestion**: No known significant effects or critical hazards.

### Over-exposure signs/symptoms

Eye contact: No specific data.Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

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

Date of issue/Date of revision: 19 February 2016 Version: 1 Page: 2/9

Safety Data Sheet

Novamid® ID1070



In case of inhalation of decomposition products in a fire, symptoms may be delayed. The Notes to physician

exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Small fire

Suitable : Use dry chemical or CO2.

Not suitable None known

Large fire

Suitable : Use water, foam or dry chemical powder.

Not suitable None known

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

Hazards from the substance or mixture : No specific fire or explosion hazard.

Hazardous combustion

products

: In case of fire, may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, (dense) black smoke, aldehydes, organic acids, nitrogen oxides (NO, NO2 etc.),

ammonia (NH<sub>3</sub>), amines. Hydrogen cyanide (HCN).

5.3 Advice for firefighters

Special protective actions

for fire-fighters

: Avoid contact with heated material.

Special protective

equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

### SECTION 6: Accidental release measures

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

For non-emergency

personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch

or walk through spilt material. Put on appropriate personal protective equipment.

For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency

personnel".

6.2 Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers,

waterways, soil or air).

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

Small spill

: Move containers from spill area. Vacuum or sweep up material and place in a designated,

labelled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for

emergency contact information and Section 13 for waste disposal.

6.4 Reference to other

sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

### SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 7.1 Precautions for safe handling

Protective measures

: Use with adequate ventilation. Local exhaust ventilation should be provided. Avoid creating dusty conditions and prevent wind dispersal. Take measures against static discharge. Keep away from

Advice on general occupational hygiene Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Date of issue/Date of revision: 19 February 2016 Version: 1 Page: 3/9



7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Store in original container, protected from direct sunlight.

7.3 Specific end use(s)

**Recommendations** : Not available. **Industrial sector specific** : Not available.

solutions Remarks

: Never stack pallets more than two high to prevent the risk of them falling over. Big Bags may not be stacked. Pallets should not be stacked along the aisles. In case the material is delivered in bulk silo, the silo can contain 0.5 bar dry air at maximum. Relief pressure via vent line. Never use the manlid

for pressure relief.

### **SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
No exposure limit value known.	

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **DNELs/DMELs**

No DNELs/DMELs available.

#### PNEC:

No PNECs available

### 8.2 Exposure controls

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### **Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating,

smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety glasses with side shields. When handling hot material, wear heat-resistant protective

gloves, clothing and face shield that are able to withstand the temperature of the molten product.

Wear suitable gloves. When handling hot material, wear heat-resistant protective gloves that are able to withstand the temperature of molten product.

Skin and body : Working clothes.

Respiratory protection : No special protection is required. In case of insufficient ventilation, wear suitable respiratory

equipment.

**Environmental exposure** 

controls

**Hand protection** 

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce

emissions to acceptable levels.

Advice on personal protection is applicable for high exposure levels. Select proper personal protection based on a risk assessment of the actual exposure situation.

Date of issue/Date of revision : 19 February 2016 Version : 1 Page: 4/9



### SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : Solid. [Pellets.]

Colour : naturally opaque, dependent on the added pigment

Odour : Not available.

Odour threshold : Not available.

pH : Not available.

Melting point/freezing point : 220 to 230 °C

Initial boiling point and : Not available.

boiling range

Softening range : Not available.
Flash point : >355 °C

Evaporation rate : Not available.
Flammability (solid, gas) : Not available.
Upper/lower flammability or : Not available.

explosive limits

Vapour pressure: Not available.Vapour density: Not available.

Relative density : 1.1 to 1.3 (Water = 1)

Density ( g/cm³ ) : 1.1 to 1.3 g/cm³

Bulk density : Not available.

**Solubility** : Insoluble in the following materials: cold water.

Solubility in water : Not available.

Partition coefficient: n- : Not available.

octanol/water

Auto-ignition temperature : > 420 °C

Decomposition temperature : >300 °C

Viscosity : Not available.

Explosive properties : Not available.

Oxidising properties : Not available.

9.2 Other information

Minimum ignition : 450 °C

temperature

## **SECTION 10: Stability and reactivity**

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : The product is stable.

10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid : No specific data.

**10.5 Incompatible materials** : No specific data.

10.6 Hazardous decomposition products

: No specific data.

Remarks : At processing temperatures some degree of thermal degradation may occur. see section 5.

# **SECTION 11: Toxicological information**

11.1 Information on toxicological effects

Acute toxicity

Conclusion/Summary : Not available.

Acute toxicity estimates

Not available.

Date of issue/Date of revision: 19 February 2016 Version: 1 Page: 5/9



#### Irritation/Corrosion

Conclusion/Summary

Eyes : Not available. Skin : Not available. Respiratory : Not available.

Sensitisation

Conclusion/Summary

Skin : Not available. Respiratory : Not available.

Mutagenicity

Conclusion/Summary

Carcinogenicity

: Not available.

Conclusion/Summary

: Not available. Reproductive toxicity

Conclusion/Summary

: Not available.

Teratogenicity

Conclusion/Summary : Not available. Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

Ingestion

#### Potential acute health effects

Eye contact No known significant effects or critical hazards.

Inhalation Exposure to decomposition products may cause a health hazard. Serious effects may be delayed

following exposure.

Heated material can cause thermal burns resulting in pain, redness, blistering. Skin contact No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics Eye contact : No specific data. Inhalation : No specific data.

Skin contact : No specific data. Ingestion : No specific data.

### Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
Not available.				

Conclusion/Summary : Not available.

General : No known significant effects or critical hazards. Carcinogenicity : No known significant effects or critical hazards. Mutagenicity : No known significant effects or critical hazards. Teratogenicity : No known significant effects or critical hazards. **Developmental effects** : No known significant effects or critical hazards. Fertility effects No known significant effects or critical hazards.

Remarks The components of this product are embedded in an impervious polymer matrix and are therefore not

biologically available. The likelihood of adverse health effects arising from normal use of the product

are considered very low.

# SECTION 12: Ecological information

12.1 Toxicity

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

### 12.3 Bioaccumulative potential

Date of issue/Date of revision: 19 February 2016 Version: 1 Page: 6/9



12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable. vPvB : Not applicable.

12.6 Other adverse effects

: No known significant effects or critical hazards.

Remarks

The components of this product are embedded in an impervious polymer matrix and are therefore not biologically available. This product is not biodegradable and not toxic to aquatic organisms.

### **SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 13.1 Waste treatment methods

#### **Product**

Methods of disposal

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste

Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

**Packaging** 

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not

feasible

**Special precautions** 

: This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

# **SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

14.6 Special precautions for

user

: **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Date of issue/Date of revision: 19 February 2016 Version: 1 Page: 7/9

Safety Data Sheet

Novamid® ID1070



14.7 Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

Remarks

: In case the material is delivered in bulk silo, the silo can contain 0.5 bar dry air at maximum. Relief

pressure via vent line. Never use the manlid for pressure relief.

### **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

#### **Annex XIV**

None of the components are listed.

### Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

#### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Ingredient name Not listed.	List name	Status
Montreal Protocol (Annexes A, B, C, E)		<u> </u>
Ingredient name Not listed.	List name	Status
Stockholm Convention on Persistent Organic	: Pollutants	
Ingredient name Not listed.	List name	Status
Rotterdam Convention on Prior Inform Conse	ent (PIC)	
Ingredient name Not listed.	List name	Status
UNECE Aarhus Protocol on POPs and Heavy	<u>Metals</u>	
Ingredient name Not listed.	List name	Status

Remarks

: Listings of substances in this section are based on the presence of these substances above the applicable concentration limit. Relevant declarations related to this product are available on request.

15.2 Chemical safety assessment

: No Chemical Safety Assessment has been carried out.

### SECTION 16: Other information

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	

Full text of abbreviated H

statements

: Not applicable.

Full text of classifications

[CLP/GHS]

: Not applicable.

Information

: DSM Engineering Plastics BV, Global Research & Technology Department

**Product Data Management** P.O. Box 1077, 6160 BB Geleen The Netherlands, Europe

E-mail: productdatamanagement.dep@dsm.com

DSM Expert Center BV/ Product Safety

Date of issue/Date of revision: 19 February 2016 Version: 1 Page: 8/9



P.O. Box 6500, 6401 JH Heerlen The Netherlands, Europe E-mail: info.worldwise@dsm.com

Alterations compared to the

previous version

: Alterations compared to the previous version are marked with a little (blue) triangle.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

Sources of key data : Literature data and/or investigation reports are available through the manufacturer.

Internal code : WW59213

Training advice : Before handling this substance/preparation, the personnel involved should be instructed by means

of this safety data sheet.

### Notice to reader

The information contained in the Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality. The information may not be or may not altogether be applicable to combinations of the product with other substances or to particular applications.

The user is responsible for ensuring that appropriate precautions are taken and for satisfying themselves that the data are suitable and sufficient for the product's intended purpose. In case of any unclarity we advise consulting the supplier or an expert.

#### History

**Date of printing** : 19 February 2016. **Date of issue** : 19 February 2016

Version : 1

Date of issue/Date of revision: 19 February 2016 Version: 1 Page: 9/9