

# Rigidax<sup>®</sup> WI-Green 24-12

## 1. Identification of the substance/mixture and of the company/undertaking



- 1.1 Product identifier  
Product name : **Rigidax<sup>®</sup> WI-Green 24-12**
- 1.2 Relevant identified uses of the substance or mixture and uses advised against  
Identified uses : Thermoplastic fixturing compound for use in metal shaping processes.  
Uses advised against : None known
- 1.3 Details of the supplier of the safety data sheet  
Manufacturer/supplier : M. Argüeso & Co., Inc. (D.B.A. Paramelt)  
2817 McCracken Street  
Muskegon, MI 49441, USA  
Tel: (+1) 231 759 7304  
Fax: (+1) 231 759 7570
- Regional contact : Paramelt  
2817 McCracken Street  
Muskegon, MI 49441, USA  
Tel: (+1) 231 759 7304  
Fax: (+1) 231 759 7570
- SDS prepared by : Quality Assurance and Regulatory Manager  
E-mail : [EHS@argueso.com](mailto:EHS@argueso.com)
- 1.4 Emergency telephone number  
For emergency advice : Tel: (+1) 231 759 7304  
Availability : Office hours 08:00 – 17:00 EST, USA

## 2. Hazards identification

- 2.1 Classification of the substance or mixture  
EC/GHS classification : Not classified as dangerous under EC/GHS criteria
- Hazard summary:  
Inhalation : None known  
Eye contact : Molten material will produce thermal burns.  
Skin contact : Molten material will produce thermal burns  
Ingestion : None known  
Other health effects : None known  
Environmental hazards : None known
- 2.2 Label elements : None known
- 2.3 Other hazards : None known

## 3. Composition information

- Description : Mixture of waxes, resins, polymers, minerals, glass fibres & oil soluble dye
- Classification : As supplied, the component(s) listed below can present physical or health hazards;

CAS No	EC No	%, w/w	Name	Classification according to 67/548/EEC	Classification according to Regulation (EC) No 1278/2008 (CLP)
91-20-3	202-049-5	<0.15%	Naphthalene	 Carc. Cat 3: R40 Xn: R22 N: R50/53	 Carc. 2: H351 Acute Tox. 4: H302 Aquatic Acute 1: H400 Aquatic Chronic 1: H410
<b>The following are included because of country workplace exposure limits – see section 8.1.</b>					
14808-60-7	238-878-4	<0.2%	Quartz	Not classified	Not classified

For the full text of the R-phrases and H-statements mentioned in this Section, see Section 16.

**4. First-aid measures**

4.1 Description of first aid measures

- Inhalation : Exposure to fumes, vapours or smoke of overheated molten product handled in confined areas can result in irritation of the respiratory tracts, and possible discomfort to sensitive individuals. Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.
- Eye contact : Exposure to fumes, vapours or smoke of overheated product can result in irritation to eyes. Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist. If molten material contacts the eye, immediately flush with plenty of running water for at least 15 minutes, holding eyelid open. Do not remove adhering material. Seek medical attention immediately.
- Skin contact : Wash with soap and water. Molten product – Cool affected areas with running water to remove heat. In general, do not remove adhering material - it may be necessary to cut through material surrounding a limb to prevent a tourniquet effect. Seek medical attention urgently.
- Ingestion : Do not induce vomiting. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Burns should be treated as thermal burns. The material will come off as healing occurs; therefore, immediate removal from skin is not necessary

4.3 Indication of any immediate medical attention and special treatment needed

- Hazards : Contact with molten product may cause severe burns to skin and eyes.
- Treatment : Treat symptomatically.

**5. Fire-fighting measures**

5.1 Extinguishing media

- Suitable extinguishing media : Water mist, dry chemical, carbon dioxide or foam.
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

## 5.2 Special hazards arising from the substance or mixture

Watch footing on floors and stairs because of possible spreading of molten material. Material can create slippery conditions. In case of fire hazardous decomposition products may be produced such as: Carbon dioxide, carbon monoxide and complex hydrocarbons. As with most solid organic compounds, a high dust concentration of this product may form an explosive atmosphere, subject to ignition by heat and static discharge. This is an unlikely scenario but users should be aware of the risk.

## 5.3 Advice for firefighters

In the event of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus and protective suit.

## 6. Accidental release measures

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

Wear appropriate personal protective equipment.

### 6.2 Environmental precautions

Should not be released into the environment. Prevent product from entering drains.

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

Solid product

: Sweep up the spilled material. If it is clean, place in a suitable container for use. If it is contaminated, collect in a suitable container for disposal. Note that pelletized product can travel some distance when spilled. Prevent the spillage entering drainage channels.

Molten product

: Wear appropriate personal protective equipment – boots, eye protection & heat resistant gloves. Attempt to contain the spill by making dams with sand or earth. A water mist can be used to cool a spill but take extreme care when doing so. Allow the spill to solidify before collecting the material for disposal. Do not let molten product enter drainage channels.

Notification procedures

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

## 7. Handling and storage

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### 7.1 Precautions for safe handling

Use only in a well ventilated area and avoid breathing fumes and dust (dust is unlikely). Avoid skin and eye contact, especially with the molten material. Do not eat, drink or smoke whilst using this product.

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

Keep product closed in its original packaging until used. Keep dry; avoid temperature extremes (keep between 5 & 30°C / 41 & 86°F) and direct sunlight. Keep away from sources of ignition, oxidizing agents and other chemicals.

### 7.3 Specific end use(s)

Avoid heating above 135°C (275°F) during the normal usage. Do not let molten product stand unused in melt tanks and injection machines. Stir product at all times.

**8. Exposure controls and personal protection**

8.1 Control parameters

Occupational exposure limit values : The following may be released from the product in the molten state. Avoid overheating the material above 100°C.

Workplace exposure limits : The following values were obtained from:  
[http://limitvalue.ifa.dguv.de/Webform\\_gw.aspx](http://limitvalue.ifa.dguv.de/Webform_gw.aspx)

Country	Long term exposure limit (8 hr. TWA reference period)	Short term exposure limit	Reference
<b>Substance:</b>	<b>Naphthalene</b>		
<b>EC #:</b>	<b>202-049-5</b>		
<b>CAS #:</b>	<b>91-20-3</b>		
Austria	10 ppm, 50 mg/m <sup>3</sup>		AT OEL
Belgium	10 ppm, 53 mg/m <sup>3</sup>	15 ppm, 80 mg/m <sup>3</sup>	BE OEL
Denmark	10 ppm, 50 mg/m <sup>3</sup>	20 ppm, 100 mg/m <sup>3</sup>	DK OEL
European Union	10 ppm, 50 mg/m <sup>3</sup>		Indicative Occupational Exposure Limit Values.
France	10 ppm, 50 mg/m <sup>3</sup>		FR VLE
Germany (AGS)	0.1 ppm, 0.5 mg/m <sup>3</sup> (inhalable aerosol)	0.1 ppm, 0.5 mg/m <sup>3</sup> (inhalable aerosol) (15 minute average value)	DE TRGS 900
Hungary	50 mg/m <sup>3</sup>		HU OEL
Ireland	10 ppm, 50 mg/m <sup>3</sup>	15 ppm, 75 mg/m <sup>3</sup> (15 minute reference period)	IE OEL
Latvia	10 ppm, 50 mg/m <sup>3</sup>	30 mg/m <sup>3</sup>	LV OEL
Poland	20 mg/m <sup>3</sup>	50 mg/m <sup>3</sup>	PL NDS
Spain	10 ppm, 53 mg/m <sup>3</sup>	15 ppm, 80 mg/m <sup>3</sup>	ES VLA
Sweden	10 ppm, 50 mg/m <sup>3</sup>	15 ppm, 80 mg/m <sup>3</sup> (15 minute average value)	SE AFS
Switzerland	10 ppm, 50 mg/m <sup>3</sup>		CH SUVA
The Netherlands	50 mg/m <sup>3</sup>	80 mg/m <sup>3</sup>	NL OEL
*United Kingdom	10 ppm, 53 mg/m <sup>3</sup>	15 ppm, 80 mg/m <sup>3</sup>	GB EH40
* The UK Advisory Committee on Toxic Substances has expressed concern that, for the OELs shown above, health may not be adequately protected because of doubts that the limit was not soundly-based. These OELs were included in the published UK 2002 list and its 2003 supplement, but are omitted from the published 2005 list.			
<b>Substance:</b>	<b>Quartz (exposure is unlikely given the product's intended use)</b>		
<b>EC #:</b>	<b>238-878-4</b>		
<b>CAS #:</b>	<b>14808-60-7</b>		
Austria	0.15 mg/m <sup>3</sup> (respirable aerosol)		AT OEL
Belgium	0.1 mg/m <sup>3</sup>		BE OEL
Denmark	0.3 mg/m <sup>3</sup> (inhalable aerosol) 0.1 mg/m <sup>3</sup> (respirable aerosol)	0.6 mg/m <sup>3</sup> (inhalable aerosol) 0.2 mg/m <sup>3</sup> (respirable aerosol)	DK OEL
France	0.1 mg/m <sup>3</sup> (respirable aerosol)		FR VLE
Ireland	0.1 mg/m <sup>3</sup> (respirable fraction)		IE OEL
Spain	0.1 mg/m <sup>3</sup> (respirable fraction)		ES VLA
Sweden	0.1 mg/m <sup>3</sup> (respirable aerosol)		SE AFS
Switzerland	0.15 mg/m <sup>3</sup> (respirable aerosol)		CH SUVA
The Netherlands	0.075 mg/m <sup>3</sup> (respirable dust)		NL OEL
<b>Exposure to the following is unlikely given that the product form and its intended application.</b>			
<b>Substance:</b>	<b>Dust – inhalable, Or, Particulates, not otherwise regulated</b>		
<b>EC #:</b>			
<b>CAS #:</b>			
Belgium	10 mg/m <sup>3</sup>		BE OEL
Germany	4 mg/m <sup>3</sup> (yearly average)		DE TRGS 900
United Kingdom	10 mg/m <sup>3</sup>		GB EH40
<b>Substance:</b>	<b>Dust – respirable, Or, Particulates, not otherwise regulated (respirable fraction)</b>		
<b>EC #:</b>			
<b>CAS #:</b>			
Belgium	3 mg/m <sup>3</sup>		BE OEL
Germany	0.3 mg/m <sup>3</sup> (dust density of 1g/cm <sup>3</sup> )	2.4 mg/m <sup>3</sup> (15 minute average)	DE TRGS 900
United Kingdom	4 mg/m <sup>3</sup>		GB EH40

## 8.2 Exposure controls

Appropriate engineering controls  
Good general ventilation should be used. If applicable, use local exhaust ventilation or other engineering controls to maintain airborne levels of dust (solid product), fume or vapour (molten product) below recommended exposure limits.

Individual protection measures, such as personal protective equipment :

- Eyes & Face : Appropriate eye protection should be worn when handling slabs and pellets, when injecting the product and when assembling patterns. A full face shield is recommended for operations involving the transfer of molten product, i.e. refilling press reservoirs
- Skin : Solid product – cotton gloves. Molten product – Impervious heat protective gloves.
- Respiratory : If engineering controls do not maintain airborne concentrations below recommended exposure limits an approved respirator must be worn. Respirator type: Air-purifying respirator with an appropriate air-purifying filter, cartridge or canister.
- Hygiene : A good standard of industrial hygiene should be practiced when using this product. Wash hands thoroughly before eating, drinking or smoking. Contaminated clothing should be laundered before reuse.
- Environmental : Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination.

## 9. Physical and chemical properties

- Physical state at 20°C. : Waxy solid
- Colour : Green
- Odour : Waxy, characteristic
- Odour threshold : Not determined
- pH : No data available
- Boiling point : No data available
- Melting point (DMP) : approx. 81.9°C. (179.5°F.)
- Flash point : >185°C (365°F), Cleveland Open Cup.
- Evaporation rate : Not determined
- Flammability (solid, gas) : No data available
- Upper/lower flammability : No data available
- Vapour pressure : No data available
- Vapour density : No data available
- Specific gravity : approx. 1.428 (20°C.)
- Solubility in water : Insoluble
- Solubility in common organic solvents : Soluble
- Partial coefficient: n-octanol/water : No data available
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available
- Viscosity (RS6000) : approx. 4000 cPs (225°F.)
- Explosive properties : No data available
- Oxidising properties : No data available



**10. Stability and reactivity**

Reactivity	: None known.
Stability	: Stable as supplied
Possibility of hazardous reactions	: None known
Conditions to avoid	: The product is organic, however, and will be subject to surface oxidation – use the product within 12 months of purchase. Avoid holding the product in the molten state when not in use. Excessive thermal exposure will degrade the product. Avoid temperatures above 135°C (275°F) where possible
Incompatible materials	: Strong oxidizing agents.
Hazardous decomposition products	: Carbon dioxide, carbon monoxide.

**11. Toxicological information**

11.1 Information on toxicological effects

Acute Exposure Inhalation	: Wax fumes have been reported to be irritating to the respiratory tract, especially to sensitized persons.
Eye contact	: Molten product will cause thermal burns on contact with the eyes.
Skin contact	: Molten product will cause thermal burns on contact with the skin.
Ingestion Use	: No data available

<b>Naphthalene (91-20-3)</b>	
LD50 oral rat	490 mg/kg
LD50 dermal rabbit	>20 g/kg
LC50 inhalation rat	>340 mg/m <sup>3</sup> (exposure time: 1 h)
ATE (oral)	500

Skin corrosion/irritation	: No data available.
Serious eye damage/irritation	: No data available.
Respiratory or skin sensitisation	: No data available.
Germ cell mutagenicity	: No data available.
Carcinogenicity	: No data available.

<b>Naphthalene (91-20-3)</b>	
IARC group	2B – Possibly carcinogenic to humans

Toxicity for reproduction	: No data available.
Summary of evaluation of the CMR properties	: No data available.

STOT – single exposure : No data available.  
 STOT – repeated exposure : No data available.  
 Aspiration hazard : No data available

**12. Ecological information**

No specific ecological information has been determined for this product. However, the product is insoluble in water and should not pose a serious threat to the environment.

12.1 Toxicity : No data available

Naphthalene (91-20-3)	
LC50 fish	5.74 – 6.44 mg/l (Exposure time: 96h – Species: Pimephales promelas [flow-through])
EC50 Daphnia	2.16 mg/l (Exposure time: 48 h – Species: Daphnia magna)
EC50 other aquatic organisms 1	0.4 mg/l (Exposure time: 72 h – Species: Skeletonema costatum)
LC50 fish 2	1.6 mg/l (Exposure time: 96 h – Species: Oncorhynchus mykiss [flow-through])
EC50 Daphnia 2	1.96 mg/l (Exposure time: 48h – Species: Daphnia magna [flow-through]).

12.2 Persistence and degradability : No data available

12.3 Bioaccumulative potential : No data available

Naphthalene (91-20-3)	
BCF fish 1	30 - 430
Log Pow	3.3 (at 20°C)

12.4 Mobility in soil : No data available

12.5 Results of PBT and vPvB assessment : No data available

12.6 Other adverse effects : No data available

Users of the product should, however, ensure that it is stored, handled and disposed of in such a manner that it is not released to the environment. Spent material from the flash fire furnace or autoclave must therefore be stored in such a manner as to prevent environmental contamination, either by solid product or rain water run-off from it.

**13. Disposal considerations**

13.1 Waste treatment methods

General information : Dispose of used product, unwanted product and related packaging in strict accordance with waste disposal legislation and any local authority requirements.

Disposal methods : Wherever possible, spent material should be returned to the manufacturer, or other qualified reprocessor, for reclamation

**14. Transportation information**

ADR/RID : Solid forms of this product are not regulated.

IMDG : Solid forms of this product are not regulated.

IATA : Solid forms of this product are not regulated.

**15. Regulatory information**

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

EC/GHS : According to EC/GHS regulations this product is not classified or labelled.

European Chemical Inventory : The ingredients in this preparation appear on the EINECS inventory.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for this preparation by the supplier

**16. Other information**

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Revision information : New SDS

Key literature references and sources for data :  
Supplier MSDS

ECHA –Guidance on the compilation of safety data sheets, Version 2.0, Dated December 2013

Guidance on the application of the CLP Criteria Version 4.0, Dated November 2013

GESTIS International limit values database

GESTIS Substance database

Other internet sources.

Full text of the R-phrases referred to under section 3.

R22 : Harmful if swallowed.  
R40 : Limited evidence of a carcinogenic effect.  
R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of the H-statements referred to under section 3.

H351 : Suspected of causing cancer.  
H302 : Harmful if swallowed.  
H400 : Very toxic to aquatic life.  
H410 : Very toxic to aquatic life with long lasting effects.

Training information : No data available.

**Disclaimer**

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