



**GRANWAX**  
Products Limited

# MATERIAL SAFETY DATA SHEET

Product name: **Granguard**

Reviewed date: September 2009

## 1. Identification of substance

Substance: **Granguard**  
Supplier: Granwax Products Ltd  
West Street  
Riddings, Alfreton,  
Derbyshire. DE55 4EW.  
Telephone: 01773 541177 Fax: 01773 541429.  
This revision September 2009

## 2. Composition/Data on components

*Composition and classification of potentially hazardous components.*

<u>Component</u>	<u>EINECS No.</u>	<u>CAS No.</u>	<u>Concentration range</u>	<u>Classification</u>	<u>Risk phrases</u>
Monomeric toluene diisocyanate Index No. 615-006-00-4		26471-62-5	Less than 0.5%	Carc. class 3, Xn (T if 1% or above)	R26-36/37/38-40-42/ 43-52/53
Xylene (mixed isomers)	215-535-7	1330-20-7	Approx. 15%	Xn	R10-20/21-38
Methoxy propyl acetate	202-849-4	108-65-6	Approx. 25%	F,Xi	R10-36
High boiling aromatic hydrocarbon solvents	265-199-0	64742-95-6	Approx. 30%	F,Xn,N	R10-37-51/53-65-66-67

## 3. Hazards identification

Flammable.  
Harmful: may cause lung damage if swallowed.  
Toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.

## 4. First aid measures

**Skin exposure:** Promptly wash the affected area with soap or mild detergent and water. Remove contaminated clothing. If symptoms occur after washing seek medical advice. Prolonged or repeated contact may cause short-term irritation, de-fatting of the skin and could result in dermatitis.

**Eye splashes:** If the material is splashed into the eye, wash the affected eye with clean running water for at least 15 minutes. Seek medical advice.

**Swallowing (ingestion):** If material is accidentally swallowed, do not make patient vomit, seek medical advice. This information should be taken with the patient when seeking medical advice.

**Inhalation:** Move patient to fresh air. If patient is unconscious, place in the recovery position and seek medical help immediately.

Do not give victim anything to drink if he is unconscious.



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## 5. Fire fighting measures

Use carbon dioxide, dry powder or foam extinguishants only. For large fires water spray should be used. Fire will produce dense black smoke containing hazardous combustion products. Wear self-contained breathing apparatus. May produce toxic fume including isocyanate vapours.

## 6. Accidental release measures

Remove all potential sources of ignition. Avoid breathing vapour. Spillages should be contained with a wet non-combustible adsorbent material and collected for disposal in accordance with the local regulations, do not place in sealed containers (evolution of carbon dioxide). Spillages should not be allowed to run to surface waters. Spillages should not be allowed to enter basements or pits where flammable vapours may collect and form an explosive atmosphere.

## 7. Handling & storage

**Handling** - Keep away from sources of heat or ignition. Ensure adequate ventilation and use suitable protective equipment, as specified below, when in use. Take precautions against the build-up of static electricity.  
**Storage** – Flammable liquid storage. Keep away from oxidizers, heat and flames. Keep in cool, dry ventilated storage.

## 8. Exposure controls & personal protection

UK Workplace Exposure Limits (WEL) as per HSE Doc. EH40/2005

Xylene	220 mg/m <sup>3</sup>	8 hour TWA	441 mg/m <sup>3</sup>	15 min. STEL Sk
Methoxy propyl acetate	274 mg/m <sup>3</sup>	8 hour TWA	548 mg/m <sup>3</sup>	15 min. STEL Sk
Toluene diisocyanate	0.02 mg/m <sup>3</sup>	8 hour TWA	0.07 mg/m <sup>3</sup>	15 min. STEL Sen
Aromatic hydrocarbon	TLV (UK SOLVENT INDUSTRY ASSOCIATION)			150 mg/m <sup>3</sup> 8 hour TWA

*Sk - Can be absorbed through skin Sen - Capable of causing respiratory sensitisation*  
From HSE Doc. EH 40/2005 and manufacturers information.

### Exposure controls:

*Occupational exposure controls;*

**Respiratory protection:** Provide sufficient ventilation during use to ensure WEL is not reached; if this is not possible organic vapour filter masks should be used (A1 or A2 EN 141) for short periods or an air-fed mask for longer exposure.

**Hand protection:** Fluorinated rubber gloves to EN 374-3 of 0.4mm thickness or greater or equivalent should be used to protect the hands during use, note – breakthrough time: “only suitable for splash protection”. Suitable work-wear or overalls should be used to protect clothing and skin.

**Eye protection:** Safety goggles or face shield should be used when handling this material to protect from liquid droplets or splashes.

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## 8. (cont) Exposure controls and personal protection

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In the case of hypersensitivity of the respiratory tract (e.g. asthmatics or chronic bronchitis sufferers) it is inadvisable to work with this product. Respiratory symptoms can occur several hours after overexposure.

Keep away from foodstuffs, drinks and tobacco. Wash hands before breaks and at end of work. Keep working clothes separate. Immediately remove contaminated clothing.

### Environmental exposure controls:

No specific environmental legislation applies, but good practice should be followed. The product should not be allowed to spill or run into surface waters.

## 9. Physical and chemical properties

### General information

Appearance: Clear yellowish liquid      Odour: Strong solvent

### Important health, safety and environmental information

pH:	Not applicable	Boiling point / range	from 140 deg. C.
Flash point	40 deg. C	Flammability	Flammable
Explosive properties	No information available	Oxidising properties	none
Vapour pressure	0.4 @ 20 deg. C	Relative density	Approx. SG 0.98
Solubility-water	Insoluble	Solubility -fat	No information available
Partition coefficient:	100% expected in n-octanol phase	Viscosity	Approx 15 seconds B4 cup
Vapour density	No information available		
Evaporation rate	No information available		

### Other information

Melting point / range    below 0 deg. C      Auto-flammability    Auto-ignition at 400 deg. C.

## 10. Stability and reactivity

This preparation is stable when stored and handled correctly.

Conditions to avoid: Heat, sparks, flames and direct sunlight.

Materials to avoid: Strong oxidising agents. Exothermic reaction with oxidising agents, amines and alcohols.

Reacts with water to produce carbon dioxide, risk of bursting in closed containers due to the pressure build-up.

Hazardous decomposition products: If burnt may produce toxic fumes including carbon monoxide and various oxides of carbon and nitrogen.



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## 11. Toxicological information

**Acute toxicity:** Toxicity following a single exposure to high levels of the product (oral, dermal, inhalation) is of a low order. Corrosivity/irritation (eye, skin, respiratory tract): Prolonged contact may cause drying of the skin, skin cracking and possibly dermatitis. Prolonged inhalation of mists may cause lung inflammation. Risk of severe pulmonary problems in the case of accidental aspiration.

**Sensitisation (skin, respiratory):** This preparation is classified as sensitising.

**Repeated dose toxicity:** Repeated contact may cause drying of the skin, skin cracking and possibly dermatitis.

**Mutagenicity:** None of the components of this preparation have been classified as mutagenic.

**Carcinogenicity:** The Monomeric toluene diisocyanate component of this preparation has been classified as a class 3 carcinogen.

**Reproductive toxicity (fertility, developmental):** None of the components of this preparation have been classified as toxic for reproductivity.

Any person with a history of skin sensitisation should take extra care when handling this preparation. Reducing the periods of skin exposure to any substance or preparation will reduce the risk of sensitization or other irritation occurring.

The product contains small amounts of free monomeric isocyanates that can cause respiratory sensitisation. Persons suffering from hypersensitivity of the respiratory tract e.g. asthmatics, should not be exposed to this product

## 12. Ecological information

**Ecotoxicity:** Resin component; Acute bacterial toxicity EC50 =>10000 mg/l  
Acute fish toxicity LC0/LC100 = 562 mg/l (Test species brachydanio rerio, 96 hours).

Based on information on the base resin.

**Mobility:** Solvent components evaporate from soil or liquid, resin reacts to give an insoluble product.

**Persistence and biodegradability:** Not readily biodegradable

**Bioaccumulation:** Solvent has the potential to bioaccumulate.

Components of this product are classified as harmful to the environment.

The exact ecological effects of this product are unknown but the solvents present are marine pollutants.

## 13. Disposal considerations

This product is classified as Hazardous. Any surplus or waste arising from the normal use of this preparation must be disposed of in accordance with the Hazardous Waste Regulations 2005 and is classified as 08 01 11. Empty containers should be treated as if still containing flammable material, classification 15 01 10.

## 14. Transport considerations

UN number: 1263

IMDG Code Class: 3.3

Packing group: III

ADR: 3

Proper Shipping Name: PAINT or PAINT RELATED MATERIAL

This preparation is classified as a marine pollutant.



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## 15. Regulatory information

Labels for this preparation must carry a HARMFUL symbol, a DANGEROUS FOR THE ENVIRONMENT symbol and the following Risk and Safety Phrases:

Contains Xylene            EC No. 215-535-7  
Contains Isocyanate      EC No. 202-039-0

R10 - Flammable liquid  
R20/21-Harmful by inhalation and in contact with the skin  
R42 -May cause sensitisation by inhalation.  
R51/53- toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R65 - Harmful: may cause lung damage if swallowed.  
S2 - Keep out of the reach of children.  
S43- In case of fire use dry powder/foam/CO2. Never use water.  
S24/25 - Avoid contact with skin and eyes.  
S61 – Avoid release into the environment. Refer to special instructions/Safety data sheet.  
S62 - If swallowed do not induce vomiting. Seek medical advice immediately and show the container or label.

An assessment of the risks to health caused by the use of this substance and the other requirements of the Control of Substances Hazardous to Health (COSHH) regulations must be made by any employer or self employed person using this preparation at work, the use of COSHH Essentials is recommended.

## 16. Other information

Revision comments – amendments have been made to sections 1, 13 and 16.  
Full text of risk phrases used in section 2;

R10        - Flammable liquid  
R20/21   - Harmful by inhalation and in contact with the skin  
R22        - Harmful if swallowed  
R26        - Very toxic by inhalation  
R36        - Irritating to the eyes  
R37        - Irritating to the respiratory system  
R38        - Irritating to the skin  
R40        - Limited evidence of a carcinogenic effect  
R42        - May cause sensitisation by inhalation.  
R43        - May cause sensitisation by skin contact  
R52        - Harmful to aquatic organisms  
R51/53   - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment  
R65        - Harmful: may cause lung damage if swallowed  
R66        - Repeated exposure may cause skin dryness or cracking.  
R67        - Vapours may cause drowsiness and dizziness

It is recommended that all persons using this product be suitably trained in the use of relevant personnel protective equipment.

No other safety information is applicable to the use of this preparation for its intended purpose.

This data sheet was compiled using information from raw material manufacturers, The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (as amended), the Approved classification and labelling guide (fifth edition) for supply, the Approved Supply List (eighth edition), EH40/2005 and the Approved Carriage List (third edition).