



Date of issue: 19.05.2005 Replaces Data Sheet of : ---
 "*" alterations as compared to previous version; n.ap. = not applicable; n.av. = not available



1 Identification of Substance / Preparation and Company

- 1.1 **Identification of Substance or Preparation**
 Trade Name : Nano-DEC 100 - Nano-DEC 130
 Article No. : n.av.
 Preparation No. : n.av.
- 1.2 **Use of the substance / preparation:**
 Decorative coating for mat-glass
- 1.3 **Company / Supplier Identification**
- 1.3.1 **Address of the Company / Supplier:**
 Nanogate Coating Systems GmbH, Gewerbepark Eschberger Weg, D - 66121 Saarbrücken
 Telephone : +49-681-980 52-0, Fax : +49-681-980 52-52
- 1.3.2 **Responsible :**
 Chemie & Vorschrift, Kannheideweg 35, D-53123 Bonn-Duisdorf
- 1.4 **Emergency - Telephone**
 Information Centre Specialising in Symptoms of Poisoning Emergency - Telephone of Company / Undertaking
 Telephone : ++49 - 761 - 19 240 Telephone : +49-681-980 52-0

2 Composition / Information on Ingredients

2.1 **Chemical Characterisation:**
 Mixture of organic solvent with special additives

2.2 **Dangerous Ingredients:**

CAS - No.	Index - No.	EEC - No.	Material	m% - range	Symbol	R - phrases
13822-56-5	n.av.	237-511-5	3-(Trimethoxysilyl)propylamin	1 - 5%	Xi	R 36/38
67-63-0	603-117-00-0	200-661-7	Propan-2-ol	> 40%	F, Xi	R 11-36-67

Remarks: Classification and labelling of a product is indicated under item 15.

3 Hazards Identification

- 3.1 **For Humans** (additional information is given under item 11) :
 Highly flammable. Irritating to eyes. Vapours may cause drowsiness and dizziness.
- 3.2 **For the Environment :**
 Product may soil public waters by hydrocarbons
- 3.3 **For Materials:**
 Materials should be tested for resistance.

4 First Aid Measures

- 4.1 **Inhalation:**
 The following symptoms may occur: dizziness, confusion, nausea.
 Remove from danger area and provide for fresh air. In the event of symptoms occurring, seek medical treatment.
- 4.2 **Skin Contact :**
 Wash with soap and water.
 In the event of symptoms occurring, seek medical treatment.
- 4.3 **Eye Contact :**
 Flush eyes out immediately with large amounts of water with eye lids lifted.
 In the event of symptoms occurring, seek medical treatment.
- 4.4 **Ingestion :**
 Rinse mouth out and drink plenty of water.
 Do not cause vomiting. Consult physician.
- 4.5 **Note to Physician:**
 Symptomatic treatment.
- 4.6 **Special Equipment:**
 n.av.



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5 Fire Fighting Measures

- 5.1 **Suitable Extinguishing Media :** Water spray jet, foam, dry chemicals, CO₂.
- 5.2 **Extinguishing Media to Avoid :** Full water jet.
- 5.3 **Fire and Explosion Hazards :**
In case of fire, product may form: Organic crackproducts and carbon oxides, nitrogenoxides (NO_x)
- 5.4 **Additional Information :** Cool containers at risk with water spray jet.
- 5.5 **Special Protective Equipment :**
Wear positive pressure self-contained breathing apparatus.
Wear full protective clothing.

6 Accidental Release Measures

- 6.1 **Personal Precautions :**
See No. 8.3 Personal Protective Equipment. Keep away from sources of ignition, do not smoke.
High risk of slipping due to leakage / spillage of product.
- 6.2 **Environmental Precautions and Methods for Cleaning up :**
Do not discharge into surface waters / groundwater. Inform responsible authorities after accidental conduction.
Take up with absorbent material (e.g. sand). Dispose of absorbed material in accordance with the regulations.
- 6.3 **Further Information :** Prevent risk of slipping by covering with mineral dispersion material.

7 Handling and Storage (For national regulations refer to item 15.2)

- 7.1 **Handling**
 - 7.1.1 **Precautions for Safe Handling :**
Keep container tightly closed. Close container straight after use or if empty.
May form explosive vapour-air mixture.
 - 7.1.2 **Precautions in Case of Fire and Explosion :**
Keep away from sources of ignition, do not smoke.
- 7.2 **Storage**
 - 7.2.1 **Storage Instructions :**
Floor must be resistant against solvents.
 - 7.2.2 **Store away from :**
Store away from explosive substances and products, oxidizers.
 - 7.2.3 **Further Information on Storage Conditions :**
Provide good room ventilation even at ground level (vapours are heavier than air).
 - 7.2.4 **Storage Class :** 3A (VCI - Concept)

8 Exposure Controls and Personal Protection

- 8.1 **Information on System Design :**
Provide for sufficient exhaustion. Provide personal protective equipment.
- 8.2 **Exposure Limits:**

8.2.1 Material		Limit Value :
2-Propanol		MAK 200 ppm; BAT Aceton, 50 mg/l, B, b, U, b
- 8.3 **Personal Protective Equipment**
 - 8.3.1 **General Protection and Hygiene :**
Do not inhale vapours. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Remove contaminated, saturated clothing immediately. Wash hands before breaks and after work.
 - 8.3.2 **Respiratory Protection :** If ventilation is insufficient, wear respiratory protection
(Short term: filter apparatus, Filter A)
 - 8.3.3 **Hand Protection :** In case of prolonged skin contact use protective gloves. (Butyl, Permeationszeit > 1h)
 - 8.3.4 **Eye Protection :** Goggles
 - 8.3.5 **Skin Protection :** Light protective clothing
 - 8.3.6 **Further Information :** Refer to special restrictions in wearing protective equipment

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9 Physical and Chemical Properties

9.1	Appearance	
9.1.1	Form : liquid	9.1.2 Colour : various, depending on coloration
9.1.3	Odour : alcohol-like	
9.2	Safety Relevant Data	
9.2.1	pH-value, undiluted :	n.av., pH-value, 50% aqueous solution : 9,5 - 10,5
9.2.2	Boiling point / Boiling - range (°C) :	n.av., Melting point / Melting range (°C) : n.av.
9.2.3	Flash point (°C, c.c.) :	12,3
9.2.4	Flammability (EEC A10/A13) :	No.
9.2.5	Ignition temperature (°C) :	n.av.
9.2.6	Autoflammability (EEC A16) :	No.
9.2.7	Oxidising properties :	No.
9.2.8	Explosion hazard :	No.
9.2.9	Explosion limits (Vol.%) lower :	n.av., upper : n.av.
9.2.10	Vapour pressure :	n.av.
9.2.11	Density (g/ml) :	0,81 - 0,95
9.2.12	Solubility (in Water) :	Partially miscible Soluble in : Polar solvents
9.2.13	Partition coefficient, n-Octanol/Water :	n.av.
9.2.14	Viscosity :	2,56mPa*s
9.2.15	Solvent separation test :	n.av.
9.2.16	Solvent content (m %) :	> 40
9.3	Further Data	
9.3.1	Thermal decomposition (°C) :	n.av.
9.3.2	Vapour density (Air = 1) :	Vapours are heavier than air.
9.3.3	Evaporation rate :	n.av.

10 Stability and Reactivity

10.1	Conditions to Avoid :
	Sparks, flames, static charge
10.2	Materials to Avoid :
	Reactions with strong oxidizing agents.
10.3	Hazardous Decomposition Products :
	Ethanopl, Methanol
10.4	Further Information :
	None.

11 Toxicological Information

11.1	Toxicological Tests :	
11.1.1	Acute Health Effects :	
	Inhalation, LC ₅₀ rat, (mg/l/4h) :	n.av.
	Ingestion, LD ₅₀ rat, (mg/kg) :	n.av.
	Skin - contact, LD ₅₀ rat, (mg/kg) :	n.av.
	Irritation (to skin / eye) :	Irritating to eyes.
	Sensitisation :	None.
11.1.2	Subacute / Chronic Toxicity :	
	Carcinogenicity :	n.av.
	Mutagenicity :	n.av.
	Teratogenicity :	n.av.
	Narcotic Effects :	Inhalation of solvent-vapours in high concentration causes narcotic effects.
11.2	Practical Experience	
11.2.1	Observations relevant for classification :	
	None.	
11.2.2	Further Observations :	
	None.	
11.3	General Remarks :	
	Classification of the preparation has been done by calculation in accordance with EEC directives.	

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12 Ecological Information

- 12.1 **Ecotoxic Effects, Aquatic Toxicity :**
n.av.
- 12.2 **Behaviour in Sewage Works :**
Mobility and Accumulation Potential : n.av.
- 12.3 **Elimination (Persistence and Degradability) :**
The organic component of the product is biodegradable.
- 12.4 **Other Ecological Information**
 - 12.4.1 COD-Value, mg/g : n.av.
 - 12.4.2 BOD₅-Value, mg/g : n.av.
 - 12.4.3 AOX-Remarks : n.av.
 - 12.4.4 Significant Components : None.
 - 12.4.5 Other adverse effects : None.

13 Disposal Considerations (For national Regulations refer to item 15.)

- 13.1 **Residues**
 - 13.1.1 Recommendation : D 10 / R1 Waste - Code - No. : 20 01 27
In addition comply with the regional authorities.
 - 13.1.2 Safe Handling: See item 7 and 15.
- 13.2 **Contaminated Packaging**
 - 13.2.1 Recommendation : Wash with suitable cleaner. Otherwise as described under Residues.
 - 13.2.2 Safe Handling : As described under Residues.

14 Transport Information

- 14.1 **Transportation by Road or Railway according to ADR and RID**
Remarks :
 Class : 3 Classification Code : F1 Packing Group : II
 Hazard-No. : 33 UN-No. : 1263
- 14.1.1 **Instruction Concerning Shipper's Declaration and Packaging :**

Volume or Mass	Name and Description	Risklabel Packing - Code or instruction	
5 l inner-, max.30 kg outer-packaging	UN 1263 Paint	n.ap.	--/4G
	UN 1263 Paint	3	0A1/Y
- 14.2 **Classification for Transportation by Inland-Navigation according to ADNO**
Remarks : Classification has not been done.
 Class : Division : Category :
- 14.2.1 **Description of Goods :**
- 14.2.2 **Remarks :**
- 14.3 **Classification for Transportation by Vessels according to IMDG**
Remarks :
 Class : 3 UN-No. : 1263 Packing Group : II
- 14.3.1 **EmS-No. :** F-E, S-D
- 14.3.2 **Marine Pollutant :** No.
- 14.3.3 **Instruction for Declaration and Labelling :**
 (Packing sizes with possible exemptions not considered)
Proper Shipping Name : Paint
Risk Label : Flammable Liquid
- 14.3.4 **Remarks :** None.

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14.4 Classification for Transportation by Aeroplane according to IATA-DGR/ICAO-TI**Remarks :**

Class : 3 UN-No. : 1263 Packing Group : II

14.4.1 Instruction for Declaration and Labelling :

(Packing sizes with possible exemptions not considered)

Proper Shipping Name : Paint

Risk Label : Flammable Liquid

Packing Instructions, Passenger : 305 Cargo : 307

14.4.2 Remarks : None.**15 Regulatory Information****15.1 Classification according to EEC-Regulations :**

Classification required by EEC : Yes.

Hazard Identification : Highly flammable & Irritant

Component(s) : contains: Propan-2-ol

R-Phrases :

R 11: Highly flammable.

R 36: Irritating to eyes.

R 67: Vapours may cause drowsiness and dizziness.

Applicable Exemptions : No.

Hazard Symbol(s) :

**S-Phrases :**

S 7: Keep container tightly closed.

S 16: Keep away from sources of ignition - No smoking.

S 24 / 25: Avoid contact with skin and eyes.

S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Additional Markings :

15.1.1 The above mentioned labelling is valid for distribution to industrial user.

Labelling (formats, exemptions, additional markings) has to be done according to respective regulations.

15.2 National Regulations

VOC-Content: n.av.

16 Other Information**Text of R phrases mentioned in Section 2**

R 10: Flammable.

R 11: Highly flammable.

R 20: Harmful by inhalation.

R 36/37: Irritating to eyes and respiratory system.

R 36/38: Irritating to eyes and skin.

R 36: Irritating to eyes.

R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 67: Vapours may cause drowsiness and dizziness.

This Material Safety Data Sheet relates to 2001/58/EEC and TRGS 220.

The statements in this Material Safety Data Sheet were made to the best of our knowledge and are as accurate as possible. They are given for information only. They do not constitute a contractual guarantee of a product's properties. They must neither be altered nor transferred to other products.

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Receipt of Data : 04.05.2005, nan110