

## 2K HS HARDENER STANDARD H400

### 1. IDENTIFICATION OF PREPARATION AND COMPANY

Trade name	2K HS Hardener Standard H400
Use	2K HS Hardener usable 2K HS PU Topcoat
Producer	JSC "Dažų ir Dangų Fabrikas"
Address	Sudervė, LT-14202 Vilnius r., Lithuania
Emergency telephone	+370 5 2490395
Fax	+370 5 2490397

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No.	EINECS No.	Chemical name	Concentration, %	Hazard Symbols	Risk phrases
-	-	Aliphatic polyisocyanate	> 30	Xn	R 10-20-36/38-43
123-86-4	204-658-1	n-Butyl acetate	10 - 30	-	R 10-66-67
1330-20-7	215-535-7	Xylene	10 - 30	Xn	R 10-20/21-38
108-65-6	203-603-9	1-metoxo-2-propyl acetate	10 - 30	Xi	R10-36

### 3. HAZARDS IDENTIFICATION

Physical/chemical hazards	Flammable. Vapours may form explosive mixtures with air.
Human health hazards	Irritant. Irritating to eyes. May cause sensitization by skin contact.
Environmental hazards	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

### 4. FIRST AID MEASURES

Inhalation	Remove to fresh air. Get medical attention if symptoms appear.
Skin contact	Remove contaminated clothing. Wash off with plenty of water and soap immediately.
Eye contact	Rinse immediately with plenty of water and seek medical advice.
Ingestion	Do not induce vomiting. Call a physician.

### 5. FIRE –FIGHTING MEASURES

Suitable extinguishing media	Alcohol resistant foam, carbon dioxide, dry chemicals, sand, earth.
Unsuitable extinguishing media	Water jet
Hazardous thermal decomposition products	Carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides, fumes.
Special protective equipment for fire fighting	A self-contained breathing apparatus, gloves, splash goggles, full suit.

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### **6. ACCIDENTAL RELEASE MEASURES**

Personal precautions	Provide adequate ventilation. Use nitrile gloves, self-contained breathing apparatus NPF 2000 or respirator NPF 400, safety goggles, personal protective clothing.
Environmental precautions	Do not empty into drains, surface waters, ground-water and soil. Prevent spread over a wide area.
Methods for cleaning up	Collect spillage with non-combustible absorbent material (sand, earth, vermiculite or universal binder). Containers in which split substance was been collected must be adequately labeled. Dispose to an authorized waste collection point.

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### **7. HANDLING AND STORAGE**

Handling	Protect against moisture. Provide good ventilation of working area. Do not eat, drink or smoke during work time.
Storage	Keep away from sources of ignition, flammable substances and direct sunlight. Vapors may form explosive mixtures with air. Keep containers tightly closed in cool, well-ventilated area.
Suitable packaging materials	Keep tightly closed in original packaging.

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### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Respiratory protection	Use only in well ventilated areas. Vapor respirator filter EN 141 type A for organic compounds or self-contained breathing apparatus.
Hand protection	Use gloves (EN 374) from PVC or butyl rubber.
Eye protection	Safety goggles (EN 166) are required when there is risk of eye contact.
Skin protection	Chemical-protection suit.
Hygienic measures	Clean skin thoroughly after work.

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### **9. PHYSICAL AND CHEMICAL PROPERTIES**

Form	Liquid
Color	Clear, colourless
Density, g/cm <sup>3</sup> (20°C)	1,00 ± 3%
pH	3,55 ± 0,5
Mixture ratio (by volume): 2K HS PU Topcoat : 2K MS Hardener	2 : 1

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### **10. STABILITY AND REACTIVITY**

Stability	Stable under normal storage conditions.
Conditions/materials to avoid	Keep away from sources of ignition. Avoid water and aqueous solutions, amines, alcohols.
Hazardous decomposition products	Carbon oxides, nitrogen oxides.

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### 11. TOXICOLOGICAL INFORMATION

Toxicity to test animals

Component	Aliphatic polyisocyanate
LD50(oral, rat)	> 2000 mg/kg
Component	Xylene, mixture of isomers
LC50(inhalation, rat)	6350 mg/l /4h
LD50(dermal, rabbit)	~ 4500 mg/kg
LD50(oral, rat)	2840 mg/kg
Component	n-Butyl acetate
LC50(inhalation, rat)	>21 mg/l /4h
LD50(dermal, rabbit)	>141400 mg/kg
LD50(oral, rat)	13100 mg/kg
Experience in practice:	
Carcinogenicity	N/a
Mutagenicity	N/a
Skin contact	May cause sensitization by skin contact.
Eye contact	May cause redness and discomfort.

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### 12. ECOLOGICAL INFORMATION

Ecotoxicity	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Component	Aliphatic polyisocyanate
LC50 (to fish)	10 - 100 mg/l
EC50 (Daphnia magna)	10 - 100 mg/l
Component	Xylene, mixture of isomers
LC50 (Onchorhynchus mykiss)	14 mg/l/ 96h
LC50 (Leuciscus idus)	86 mg/l/ 48h
EC50 (Daphnia magna)	165 mg/l/ 24h
Component	n-Butylacetatas
LC50 (Leuciscusidus)	62 mg/l/ 96h
EC50 (Daphnia magna)	73 mg/l/ 24h
IC50 (Desmodesmus subspicatus)	675 mg/l /72h
EC50 (Ps.putida)	959 mg/l /18h
Mobility	Solvents are evaporated. Diisocyanates persist.
Degradability	N/a
Bioaccumulation	N/a

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### 13. DISPOSAL CONSIDERATIONS

Methods to disposal	Disposal in accordance with the respective national regulations.
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### 14. TRANSPORT INFORMATION

Transport	Name of substance	Hazard identification number	Class	UN number	Packaging group
Road/Railway ADR/RID	Hardener	30	3	1263	III
Sea IMDG	Hardener	-	3.3	1263	III
Air ICAO/IATA	Hardener	-	3	1263	III

### 15. REGULATORY INFORMATION

Labeling in accordance with EC directives

Hazard symbols

Risk phrases

Xi Irritant

R 10 Flammable

R 36 Irritating to eyes

R 43 May cause sensitization by skin contact

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

S 7/8 Keep container tightly closed and dry

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

S 51 Use only in well ventilated areas

S 61 Avoid release to the environment. Refer to special instructions / Safety data sheets

Safety phrases

Hazard-determining components of labeling

Contains Xylene (CAS No.1330-20-7)

Contains isocyanates. See information supplied by the manufacturer

### 16. OTHER INFORMATION

The information of this SDS is based on the present state of our knowledge and on current EU and national laws. The product is not to be used for other purposes than those specified under section 1 without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfill the demand laid down in the local rules and legislation. The information in this SDS is meant as a description of the safety requirements of our product: it is not be considered as a guarantee of the product's properties.

N/a - not applicable