

YVA951\_E1

Material Safety Data Sheet  
PERFECTION PLUS VARNISH CURING AGENT



Bulk Sales Reference No.:  
MSDS Revision Date:  
MSDS Revision Number:

Sales  
Order: {SalesOrd}  
YVA951  
05/04/2009  
E1-2

1. Identification of the preparation and company

1.1. Product identifier

Product Identity PERFECTION PLUS VARNISH CURING AGENT  
Bulk Sales Reference No. YVA951

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

Intended Use See Technical Data Sheet.  
Application Method See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name Akzo Nobel Coatings  
International Paint LLC  
2270 Morris Avenue  
P. O. Box 386

Emergency

CHEMTREC (USA) (800) 424-9300  
International Paint (713) 527-3887  
Poison Control Center (800) 854-681  
Customer Service  
International Paint (800) 589-1267  
Fax No. (800) 631-7481

2. Hazard identification of the product

2.1. Classification of the substance or mixture

2.2. Label elements

Using the Toxicity Data listed in section 11 & 12 the product is labelled as follows.

HMIS Rating Health: 2\* Flammability: 3 Reactivity: 0

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Hexamethylene diisocyanate homopolymer CAS Number: 0028182-81-2	50 - 75	Skin Sens. 1;H317	[1]
Propylene glycol monomethyl ether acetate CAS Number: 0000108-65-6	10 - 25	Flam. Liq. 3;H226	[1]

Xylenes (o-, m-, p- isomers) CAS Number: 0001330-20-7	10 - 25	Flam. Liq. 3;H226 Acute Tox. 4;H332 Acute Tox. 4;H312 Skin Irrit. 2;H315 Eye Irrit. 2;H319 STOT SE 3;H335 Asp. Tox. 1;H304	[1][2]
Butoxyl CAS Number: 0004435-53-4	10 - 25	Eye Irrit. 2;H319	[1]
Ethyl orthoformate CAS Number: 0000122-51-0	1.0 - 10	Flam. Liq. 2;H225	[1]
Hexamethylene diisocyanate CAS Number: 0000822-06-0	0.10 - 1.0	Acute Tox. 3;H331 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Irrit. 2;H315 Resp. Sens. 1;H334 Skin Sens. 1;H317	[1][2]

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of the phrases are shown in Section 16.

#### 4. First aid measures

##### 4.1. Description of first aid measures

General	Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean or destroy contaminated shoes.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Eyes	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin	In case of contact, immediately flush skin with soap and plenty of water. Get medical attention immediately.
Ingestion	If swallowed, immediately contact Poison Control Center at 1-800-854-6813. DO NOT induce vomiting unless instructed to do so by medical personnel. Never give anything by mouth to an unconscious person.

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

Overview	NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Avoid contact with eyes, skin and clothing. May cause allergic respiratory reaction.
Inhalation	Harmful if inhaled. May cause lung injury. Causes nose and throat irritation. Vapors may affect the brain or nervous system causing dizziness, headache or nausea.
Eyes	Risk of serious damage to eyes. Do not get in eyes. Protective equipment should be selected to provide protection from exposure to the chemicals listed in Section 3 of this document. Depending on the site-specific condition of use, safety glasses, chemical goggles, and/or head and face protection may be required to prevent contact. The equipment must be thoroughly cleaned, or discarded after each use.
Skin	Causes skin irritation. May be harmful if absorbed through the skin.
Ingestion	Harmful if swallowed. May cause abdominal pain, nausea, vomiting, diarrhea, or drowsiness.

Chronic effects

#### 5. Fire-fighting measures

##### 5.1. Extinguishing media

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

##### 5.3. Advice for fire-fighters

ERG Guide No.

#### 6. Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
- 6.2. Environmental precautions
- 6.3. Methods and material for containment and cleaning up

7. Handling and storage
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7.1. Precautions for safe handling  
Handling

In Storage

7.2. Conditions for safe storage, including any incompatibilities

7.3. Specific end use(s)

8. Exposure controls and personal protection
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8.1. Control parameters  
Exposure

CAS No.	Ingredient	Source	Value
0000108-65-6	Propylene glycol monomethyl ether acetate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
		OHSA, CAN	50 ppm TWA; 270 mg/m3 TWA
		Mexico	No Established Limit
		Brazil	No Established Limit
0000122-51-0	Ethyl orthoformate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
		OHSA, CAN	No Established Limit
		Mexico	No Established Limit
		Brazil	No Established Limit
0000822-06-0	Hexamethylene diisocyanate	OSHA	No Established Limit
		ACGIH	0.005 ppm TWA
		NIOSH	0.005 ppm TWA; 0.035 mg/m3 TWA 0.020 ppm Ceiling (10 min); 0.140 mg/m3 Ceiling (10 min)
		Supplier	No Established Limit
		OHSA, CAN	0.005 ppm TWA (designated substances regulation, listed under Isocyanates, organic compounds); 0.02 ppm Ceiling (designated substances regulation, listed under Isocyanates, organic compounds) 0.005 ppm TWA (listed under Isocyanates, organic compounds (Hexamethylene diisocyanate (HDI)));
		Mexico	No Established Limit
		Brazil	No Established Limit
0001330-20-7	Xylenes (o-, m-, p- isomers)	OSHA	100 ppm TWA; 435 mg/m3 TWA 150 ppm STEL; 655 mg/m3 STEL
		ACGIH	100 ppm TWA 150 ppm STEL
		NIOSH	No Established Limit
		Supplier	No Established Limit
		OHSA, CAN	100 ppm TWA 150 ppm STEL
		Mexico	100 ppm TWA LMPE-PPT; 435 mg/m3 TWA LMPE-PPT 150 ppm STEL [LMPE-CT]; 655 mg/m3

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		STEL [LMPE-CT]	
0004435-53-4	Butoxyl	Brazil	78 ppm TWA LT; 340 mg/m3 TWA LT
		OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
		OHSA, CAN	No Established Limit
		Mexico	No Established Limit
0028182-81-2	Hexamethylene diisocyanate homopolymer	Brazil	No Established Limit
		OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
		OHSA, CAN	No Established Limit
		Mexico	No Established Limit

Health Data

CAS No.	Ingredient	Source	Value
0000108-65-6	Propylene glycol monomethyl ether acetate	NIOSH	No Established Limit
0000122-51-0	Ethyl orthoformate	NIOSH	No Established Limit
0000822-06-0	Hexamethylene diisocyanate	NIOSH	Respiratory effects and sensitization pulmonary irritation (Listed under
0001330-20-7	Xylenes (o-, m-, p- isomers)	NIOSH	Central nervous system depressant; respiratory and eye irritation
0004435-53-4	Butoxyl	NIOSH	No Established Limit
0028182-81-2	Hexamethylene diisocyanate homopolymer	NIOSH	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000108-65-6	Propylene glycol monomethyl ether acetate	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000122-51-0	Ethyl orthoformate	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000822-06-0	Hexamethylene diisocyanate	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0001330-20-7	Xylenes (o-, m-, p- isomers)	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0004435-53-4	Butoxyl	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0028182-81-2	Hexamethylene diisocyanate homopolymer	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;



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(1330-20-7)	Category: 5	Rabbit - Category: 4	Category: 4	
Butoxyl - (4435-53-4)	4,210.00, Rat - Category: 5	No data available	No data available	No data available
Ethyl orthoformate - (122-51-0)	7,060.00, Rat - Category: NA	17,820.00, Rabbit - Category: NA	No data available	No data available
Hexamethylene diisocyanate - (822-06-0)	No data available	No data available	No data available	No data available

Item	Category	Hazard
Acute Toxicity (mouth)	Not Classified	Not Applicable
Acute Toxicity (skin)	Not Classified	Not Applicable
Acute Toxicity (inhalation)	Not Classified	Not Applicable
Skin corrosion/irritation	Not Classified	Not Applicable
Eye damage/irritation	Not Classified	Not Applicable
Sensitization (respiratory)	Not Classified	Not Applicable
Sensitization (skin)	Not Classified	Not Applicable
Germ toxicity	Not Classified	Not Applicable
Carcinogenicity	Not Classified	Not Applicable
Reproductive Toxicity	Not Classified	Not Applicable
Specific target organ systemic toxicity (single exposure)	Not Classified	Not Applicable
Specific target organ systemic Toxicity (repeated exposure)	Not Classified	Not Applicable
Aspiration hazard	Not Classified	Not Applicable

12. Ecological information

12.1. Toxicity

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Hexamethylene diisocyanate homopolymer - (28182-81-2)	100.00, Danio rerio	100.00, Daphnia magna	100.00 (72 hr), Scenedesmus subspicatus
Propylene glycol monomethyl ether acetate - (108-65-6)	100.00, Salmo gairdneri	500.00, Daphnia magna	Not Available
Xylenes (o-, m-, p- isomers) - (1330-20-7)	3.30, Oncorhynchus mykiss	8.50, Palaemonetes pugio	100.00 (72 hr), Chlorococcales
Butoxyl - (4435-53-4)	7.10, Danio rerio	360.00, Daphnia magna	Not Available
Ethyl orthoformate - (122-51-0)	592.00, Leuciscus idus	Not Available	Not Available
Hexamethylene diisocyanate - (822-06-0)	82.80, Danio rerio	89.10, Daphnia magna	77.40 (72 hr), Desmodesmus subspicatus

12.2. Persistence and degradability

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

13. Disposal considerations

## 13.1. Waste treatment methods

## 14. Transport information

## 14.1. UN number

## 14.2. UN proper shipping name

## 14.3. Transport hazard class(es)

## DOT (Domestic Surface Transportation)

DOT Proper Shipping  
Name

DOT Hazard Class

UN / NA Number

DOT Packing Group

CERCLA/DOT RQ gal. / lbs.

## IMO / IMDG (Ocean Transportation)

IMDG Proper  
Shipping NameIMDG Hazard Class  
Sub Class

IMDG Packing Group

System Reference 181  
Code

## 14.4. Packing group

## 14.5. Environmental hazards

IMDG Marine Pollutant:

## 14.6. Special precautions for user

Not Applicable

## 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not Applicable

## 15. Regulatory information

## Regulatory Overview

## WHMIS Classification

## DOT Marine Pollutants (10%):

(No Product Ingredients Listed)

## DOT Severe Marine Pollutants (1%):

(No Product Ingredients Listed)

## EPCRA 311/312 Chemicals and RQs (&gt;.1%) :

Hexamethylene diisocyanate (100 lb final RQ; 45.4 kg final RQ)

Xylenes (o-, m-, p- isomers) (100 lb final RQ; 45.4 kg final RQ)

## EPCRA 302 Extremely Hazardous (&gt;.1%) :

(No Product Ingredients Listed)

## EPCRA 313 Toxic Chemicals (&gt;.1%) :

Hexamethylene diisocyanate

Xylenes (o-, m-, p- isomers)

## Mass RTK Substances (&gt;1%) :

Xylenes (o-, m-, p- isomers)

## Penn RTK Substances (&gt;1%) :

Ethyl orthoformate

Xylenes (o-, m-, p- isomers)

## Penn Special Hazardous Substances (&gt;.01%) :

(No Product Ingredients Listed)

## RCRA Status:

(No Product Ingredients Listed)

## N.J. RTK Substances (&gt;1%) :

Butoxyl

Ethyl orthoformate

Xylenes (o-, m-, p- isomers)

N.J. Special Hazardous Substances (>.01%) :

Ethyl orthoformate

Xylenes (o-, m-, p- isomers)

N.J. Env. Hazardous Substances (>.1%) :

Hexamethylene diisocyanate

Xylenes (o-, m-, p- isomers)

Proposition 65 - Carcinogens (>0%):

(No Product Ingredients Listed)

Proposition 65 - Female Repro Toxins (>0%):

(No Product Ingredients Listed)

Proposition 65 - Male Repro Toxins (>0%):

(No Product Ingredients Listed)

Proposition 65 - Developmental Toxins (>0%):

(No Product Ingredients Listed)

16. Other information
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The full text of the phrases appearing in section 3 is:

H225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H372 Causes damage to organs through prolonged or repeated exposure.

This is the first revision of this SDS format, changes from previous revision not applicable.

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