

Date of issue

: 5/15/2015

1. Product and company identification		
	Prepared by	
	Akzo Nobel Coatings Inc.	
Prepared for	1431 Progress Ave.	
ATTN:	High Point, NC 27261 US	
Wurth Louis and Company		
9826 SOUTH PROSPERITY	(336) 841-5111	
	In case of emergency (Health or Spills):	
WEST JORDAN, UT 84081 US	CHEMTREC (US and Canada) (800) 424-9300	

Product no.	: 873-0870
Container Code(s)	: 873-0870-D1FP, 873-0870-D5PCT
Product - Class	: Catalyst
Customer Part Number	1
Customer ShipTo ID	: 0000108963

: 5/15/2015.

2. Hazards identification

Date of printing

Physical state	:	Liquid.
OSHA/HCS status	:	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview	:	DANGER!
		FLAMMABLE LIQUID AND VAPOR. MAY BE FATAL IF SWALLOWED. CAUSES EYE AND SKIN BURNS. CAUSES RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
		Keep away from heat, sparks and flame. Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
Routes of entry	:	Dermal contact. Eye contact. Inhalation. Ingestion.
Potential acute health effects		
Inhalation	:	Severely irritating to the respiratory system.
		Other effects of inhalation may include: blood effects, CNS effects, cough, diarrhea, dizziness, drowsiness, fatigue, headache, nausea, pulmonary edema, shortness of breath, vomiting, weakness, wheezing,
Ingestion	:	Very toxic if swallowed. May cause burns to mouth, throat and stomach.
		Other effects of ingestion may include : abdominal pain, blood effects, burns, CNS effects, diarrhea, dizziness, drowsiness, fatigue, gastric disturbances, headache, incoordination, irritation, kidney damage, liver damage, nausea, vomiting, weakness,
Skin	:	Corrosive to the skin. Causes burns. Harmful in contact with skin. Other effects of skin contact may include: dehydration, dermatitis, discoloration, blistering,
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Hazards identification 2.

	Effects due to absorption through skin may include: blood effects, CNS effects, diarrhea, dizziness, drowsiness, fatigue, headache, nausea, vomiting, weakness,
Eyes :	Corrosive to eyes. Causes burns.
	Other effects of eye contact may include : burning, eye damage, redness, tearing,
Potential chronic health effects	
Carcinogenicity :	No known significant effects or critical hazards.
Mutagenicity :	No known significant effects or critical hazards.
Teratogenicity :	No known significant effects or critical hazards.
Target organs :	Contains material which may cause damage to the following organs: blood, kidneys, liver, skin, central nervous system (CNS).

Medical conditions aggravated by over-

: pulmonary conditions, skin disorders, liver conditions, respiratory conditions,

exposure

NOTICE: Reports have associated repeated and prolonged OVEREXPOSURE to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents of this package may be harmful or fatal.

See toxicological information (Section 11)

Composition/information on ingredients 3.

Name ethyl alcohol	CAS number % by weight 64-17-5	5.9 kPa (44.6 mm Hg) [room temperature]	Exposure limits ACGIH TLV (United States). STEL: 1000 ppm 15 minutes. OSHA PEL (United States).
ethyl acetate	141-78-6	10.1 kPa (76 mm Hg) [room temperature]	TWA: 1000 ppm 8 hours. ACGIH TLV (United States). TWA: 400 ppm 8 hours. OSHA PEL (United States). TWA: 400 ppm 8 hours.
p-toluene sulfonic acid propan-2-ol	104-15-4 67-63-0	Not available. 4.4 kPa (33mm Hg) [room temperature]	ACGIH TLV (United States). TWA: 200 ppm 8 hours. STEL: 400 ppm 15 minutes. OSHA PEL (United States). TWA: 400 ppm 8 hours.
phosphoric acid	7664-38-2	0.29 kPa (2.2 mm Hg) [room temperature]	ACGIH TLV (United States). TWA: 1 mg/m ³ 8 hours. STEL: 3 mg/m ³ 15 minutes. OSHA PEL (United States). TWA: 1 mg/m ³ 8 hours.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid mea	4. First aid measures				
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.				
Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Chemical burns must be treated promptly by a physician. Get medical attention immediately if symptoms occur.				
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4. First aid mea	sures
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Chemical burns must be treated promptly by a physician. Get medical attention immediately if symptoms occur.
Inhalation	 Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately if symptoms occur.
Ingestion	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately. Call medical doctor or poison control center immediately.
5. Fire-fighting	measures
Flammability of the product	: Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
Flash point	: Closed cup: -4℃ (24.8年)
Flammable limits	: Lower: 2% Upper: 19%
Extinguishing media	
Suitable	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Not suitable	: Do not use water jet.
Special exposure hazards	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides phosphorus oxides
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	UNUSUAL FIRE HAZARDS: During emergency conditions, overexposure to products of combustion may cause a health hazard; symptoms may not be immediately apparent. Obtain medical attention.
Special remarks on fire hazards	: Not available.

Special remarks on : Not available.

explosion hazards

6.

Accidental release measures

Personal precautions No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

6. Accidental release measures

Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods for cleaning up		
Small spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

7. Handling and storage

Handling	: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Do not enter confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
Storage	: Store in accordance with local regulations. Store in approved area. Store in original

: Store in accordance with local regulations. Store in approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Engineering measures	:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Personal protection		Selection of personal protective equipment (PPE) is to be established by the employer performing a PPE hazard assessment. In the U.S.A, OSHA requires completion of a documented PPE hazard assessment as described in 29 CFR 1910.132.
Respiratory	:	Use properly fitted respiratory protection complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

8. Exposure controls/personal protection

	Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/ or hazardous fumes. Wet sanding/flatting should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.
Hands	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Eyes	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
Skin	 Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other protection	: Not available.

9. Physical and chemical properties

Physical state	1	Liquid.
Burning time	1	Not applicable.
Burning rate	1	Not applicable.
Color	1	Not available.
Odor	1	Not available.
Taste	1	Not available.
Molecular weight	1	Not applicable.
Molecular formula	1	Not applicable.
рН	1	Not available.
Boiling/condensation point	1	74 to 154℃ (165.2 to 309.2뚜)
Melting/freezing point	1	Not available.
Critical temperature	1	Not available.
Relative density	1	0.892
Vapor density	1	Heavier than air
Volatility	1	81.33% (w/w)
Odor threshold	1	Not available.
Evaporation rate	4	Highest known value: Greater than 1. (ethyl alcohol) compared with butyl acetate
Viscosity	1	Not available.
lonicity (in water)	1	Not available.
Dispersibility properties	1	Not available.
Solubility	1	Not available.

10. Stability and reactivity

Chemical stability	: The product is stable, under normal conditions of storage and use.
Hazardous polymerization	: Will not undergo hazardous polymerization.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Other Conditions to avoid: light, moisture, allow air blanket above liquid, drying out,
Materials to avoid	: Reactive or incompatible with the following materials: oxidizing materials, metals, acids and alkalis.
Hazardous decomposition products	: Not available.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
p-toluene sulfonic acid	LD50 Oral	Rat	2480 mg/kg	
phosphoric acid	LD50 Dermal	Rabbit	2740 mg/kg	-
	LD50 Oral	Rat	1530 mg/kg	-
ethyl acetate	LD50 Oral	Rat	5620 mg/kg	-
	LC50 Inhalation Vapor	Rat	1600 ppm	8 hours
propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
	LC50 Inhalation Vapor	Rat	12000 ppm	8 hours
ethyl alcohol	LD50 Dermal	Rabbit	20000 mg/kg	-
	LD50 Oral	Rat	7060 mg/kg	-
	LC50 Inhalation Vapor	Rat	20000 ppm	10 hours
Carcinogenicity				
Not available.				
<u>Mutagenicity</u>				
Product/ingredient name Not available.	Test	Experi	iment Re	sult
Teratogenicity				
Product/ingredient name Not available.	Result	Species	Dose	Exposure

12. Ecological information

Data available upon request.

13. Disposal considerations

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Waste disposal
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: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere

13. Disposal considerations

inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport information

Note: Information contained in this section may vary from the actual shipping description depending on quantity in containers, mode of shipment and use of exemptions.

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN2924	Flammable liquid, corrosive, n.o.s. (ethyl alcohol, p- toluene sulfonic acid) RQ (ethyl acetate)	3 (8)	11		RQ: 22225.3lbs (10079.5kgs) [ethyl acetate]
TDG Classification	UN2924	Flammable liquid, corrosive, n.o.s. (ethyl alcohol, p- toluene sulfonic acid)	3 (8)	II		-
IMDG Class	UN2924	Flammable liquid, corrosive, n.o.s. (ethyl alcohol, p- toluene sulfonic acid)	3 (8)	11		-
IATA-DGR Class	UN2924	Flammable liquid, corrosive, n.o.s. (ethyl alcohol, p- toluene sulfonic acid)	3 (8)	11		-

PG* : Packing group

15. Regulatory information

United States

U.S. Federal regulations

: United States inventory (TSCA 8b) : All components are listed or exempted. (HAPS) Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

CAS number

SARA 313

Form R - Reporting requirements

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

Product name

Not applicable.

Concentration

873-0870	0000108963	5/15/2015.		
15. Regu	latory information			
California Pro	<u>o. 65</u>			
Not applicable				
Ingredient na	me <u>Cancer</u> <u>Reproduct</u>	ive <u>No significant risk</u> <u>Maxir</u>	<u>num_</u>	
			otable dosage	
Not applicable		level		
<u>Canada</u>				
Canada inver	tory : All components of this product are	on the CEPA DSL inventory.		
•	has been classified in accordance with the hazard of contains all the information required by the Control		Regulations	
International r	egulations			
International	China inventory (IECSC): All comp Japan inventory: All components a Korea inventory: All components a Malaysia Inventory (EHS Registe New Zealand Inventory of Chemic exempted.	ponents are listed or exempted. are listed or exempted. are listed or exempted. r): Not determined. cals (NZIOC): All components are listed or exempted.		

** All values in this section reported as percentage by weight, unless otherwise specified.

16. Other information

HMIS III ® Hazardous Material Information	:	H
System (U.S.A.)		F

Health-3Flammability3Physical hazards0Personal protection4

Caution: HMIS III ® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risk, and 4 representing severe hazards or risk. Although HMIS III ® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS III ® ratings are to be used with a fully implemented HMIS III ® program. HMIS III ® is a registered mark of the National Paint & Coatings Association (NPCA).

The customer is responsible for determining the PPE code for this material.

Other special considerations

: Not available.

Notice to reader

IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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16. Other information

Brand names mentioned in this data sheet are trademarks of or are licensed to Akzo Nobel.