

## Safety Data Sheet

**DURASOL™ 841**

Revision Date 2011.08.02

**1. Product and company identification**

**Product name** DURASOL™ 841

**MSDS Number** 300000017786

**Product type** Acrylic Resin, Solution

**Product use** Coatings Applications

**Manufacturer, Importer, Supplier**

**Contact person** 4information@momentive.com

**Telephone**

**Emergency telephone number**

**2. Hazards identification**

GHS Classification	Hazard Class	Category
	FLAMMABLE LIQUIDS	Category 3
	ACUTE TOXICITY:SKIN	Category 5
	SKIN CORROSION/IRRITATION	Category 2
	SERIOUS EYE DAMAGE/ EYE IRRITATION	Category 2A
	TOXIC TO REPRODUCTION [Fertility]	Category 1B
	TOXIC TO REPRODUCTION [Unborn child]	Category 1B
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [central nervous system (CNS), kidneys, and liver,]	Category 1
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation and Narcotic effects]	Category 3
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) [central nervous system (CNS), and respiratory tract,]	Category 1

**GHS label elements**

**Signal word** Danger

**Hazard statements** H226 - Flammable liquid and vapor. H313 - May be harmful in contact with skin. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H360 - May damage fertility or the unborn child. H370 - Causes damage to organs: central nervous system (CNS), kidneys, liver, H335 - May cause respiratory irritation. H336 - May cause drowsiness and dizziness. H372 - Causes damage to organs through prolonged or repeated exposure: respiratory tract,

**Symbol**



**Precautionary statements**

<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye/face protection. Keep away from ignition sources such as heat/sparks/open flame. - No smoking. Use explosion-proof electrical/ventilating/lighting/material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
<b>Response</b>	Call a POISON CENTER or doctor/physician. <b>IF INHALED:</b> Remove to fresh air and keep at rest in a position comfortable for breathing. <b>IF ON SKIN (or hair):</b> Remove/Take off immediately all contaminated clothing. Take off contaminated clothing and wash before re-use. Rinse skin with water/shower. Wash with plenty of soap and water. If skin irritation occurs, seek medical advice/attention. <b>IF IN EYES:</b> Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention. Wash hands after handling. IF exposed or concerned: Call a POISON CENTER or doctor/physician.
<b>Storage</b>	Store locked up. Store in cool/well-ventilated place.
<b>Disposal</b>	Dispose of contents and container in accordance with all local, regional, national and international regulations.

See section 11 for more detailed information on health effects and symptoms.

### 3. Composition/Information on ingredients

Substance/mixture : Mixture

<u>Hazardous ingredient name</u>	<u>CAS number</u>	<u>WT %</u>
Xylene	1330-20-7	25 - 35
Butyl Acetate	123-86-4	1 - 10

### 4. First aid measures

<b>Eye contact</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
<b>Skin contact</b>	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Inhalation</b>	Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide

artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Ingestion**

Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. 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. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Protection of first aid personnel**

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.

**Notes to physician**

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See section 11 for more detailed information on health effects and symptoms.

## 5. Fire-fighting measures

**Flammability of the product**

Flammable liquid and vapor. 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.

**Extinguishing media****Suitable**

Use dry chemical, CO<sub>2</sub>, 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 combustion products**

Decomposition products may include the following materials: carbon dioxide, carbon monoxide,

**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.

## 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

**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).

**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. Use spark-proof tools and explosion-proof equipment. Wash spillages into an effluent treatment plant or proceed as follows. 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

**Small spill**

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## 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. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and 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 only 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 a segregated and 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

### Thailand

#### Hazardous ingredient

#### name

Xylene

#### Occupational exposure limits

#### **Time Weighted Average (TWA)**

435 mg/m<sup>3</sup> 100 ppm

**Consult local authorities for acceptable exposure limits.**

#### **Recommended monitoring procedures**

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

#### **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.

#### **Respiratory**

Use a properly fitted, air-purifying or air-fed respirator 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.

#### **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.

#### **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, gases or dusts.

#### **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.

#### **Environmental exposure controls**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9. Physical and chemical properties

**Information on basic physical and chemical properties****Appearance**

Physical state	:	Viscous liquid.
Color	:	Colorless/Colourless
Odor	:	Hydrocarbon.
Odor threshold	:	Not determined
pH	:	Not available
Initial boiling point and boiling range	:	126 - 143 °C (259 - 289 °F)
Flash point	:	28 °C (82 °F)
Evaporation rate	:	Not determined
Flammability	:	Not determined
Explosion limits		
Upper:	:	7.5 %(V)
Lower:	:	1.4 %(V)
Vapor pressure	:	10 hPa @20 °C (68 °F) (Solvent)
Vapor density	:	Not determined
Relative density	:	1.04
Solubility	:	Immiscible
Partition coefficient: n-octanol/water	:	Not determined
Auto-ignition temperature	:	Not determined
Decomposition temperature	:	Not determined
Viscosity	:	Kinematic-Not determined Dynamic- 2,500 - 4,000 mPa·s @25 °C (77 °F)

**Other information**

Not applicable.

**10. Stability and reactivity**

<b>_Stability</b>	The product is stable.
<b>Conditions to avoid</b>	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. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy.
<b>Materials to avoid</b>	Reactive or incompatible with the following materials: oxidizing materials,
<b>Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**11. Toxicological information****Most important health effects****Potential acute health effects**

<b>Inhalation</b>	:	Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation.
<b>Ingestion</b>	:	Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.
<b>Skin contact</b>	:	May be harmful in contact with skin. Causes skin irritation.
<b>Eye contact</b>	:	Causes serious eye irritation.

**Potential chronic health effects**

<b>General</b>	:	Causes damage to organs through prolonged or repeated exposure.
<b>Inhalation</b>	:	No known significant effects or critical hazards.
<b>Ingestion</b>	:	No known significant effects or critical hazards.
<b>Skin contact</b>	:	No known significant effects or critical hazards.
<b>Eye contact</b>	:	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	:	No known significant effects or critical hazards.
<b>Mutagenicity</b>	:	No known significant effects or critical hazards.
<b>Teratogenicity</b>	:	May damage the unborn child.
<b>Developmental effects</b>	:	No known significant effects or critical hazards.
<b>Fertility effects</b>	:	May damage fertility.

**Symptoms related to the physical, chemical and toxicological characteristics**

<b>Inhalation</b>	:	Adverse symptoms may include the following: respiratory tract irritation, coughing, nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness,
<b>Ingestion</b>	:	No specific data.
<b>Skin contact</b>	:	Adverse symptoms may include the following: irritation, redness,
<b>Eye contact</b>	:	Adverse symptoms may include the following: pain or irritation, watering, redness,

**Acute toxicity****Hazardous ingredient name**

Xylene	LD50 Oral	Rat	4,300 mg/kg
	LC50 Inhalation	Rat	5000 ppm/4 h
	LD50 Dermal	Rabbit	> 1,700 mg/kg
Butyl Acetate	LD50 Oral	Rat	10,768 mg/kg
	LD50 Oral	Mouse	6,000 mg/kg
	LC50 Inhalation	Rat	390 ppm/4 h
	LC50 Inhalation	Mouse	6 mg/l/2 h
	LD50 Dermal	Rabbit	> 17,600 mg/kg

**Other Toxicological Information****Carcinogenicity****Classification****Hazardous ingredient name**

Xylene	ACGIH	Not classifiable as to its carcinogenicity to humans.
	IARC	IARC Group 3, not classifiable as to carcinogenicity to humans
	NTP	Not listed
	OSHA	Not classified
	EU	Not classified

Butyl Acetate

ACGIH	Not classified
IARC	Not classified
NTP	Not listed
OSHA	Not classified

## 12. Ecological information

### Environmental effects

No known significant effects or critical hazards.

### Aquatic ecotoxicity

#### Hazardous ingredient name

Xylene

Fresh water	Acute LC50 13.4 mg/l/96 h	Fathead minnow
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Butyl Acetate

Fresh water	Acute LC50 18 mg/l/4 d	Fathead minnow
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Other adverse effects

No known significant effects or critical hazards.

## 13. Disposal considerations

### Waste disposal

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## 14. Transport information

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

### International transport regulations

Regulatory information	UN/NA number	Proper shipping name	Classes/*PG	Additional information
ADR	1866	RESIN SOLUTION, flammablecontains (Xylene, Butyl Acetate)	Class 3 II	
IMO/IMDG	1866	RESIN SOLUTION, flammable contains (Xylene, Butyl Acetate)	Class 3 II	
IATA (Cargo)	1866	RESIN SOLUTION, flammable contains (Xylene, Butyl Acetate)	Class 3 II	

\*PG : Packing group

## 15. Regulatory information

### National regulations

#### Hazardous Substance Act B.E. 2535 (1992)Type

<u>Ingredient name</u>	<u>Type</u>	<u>Authority</u>	<u>Conditions</u>
Butyl Acetate	The production, import,	Department of	The production,



export, or having in possession must comply with the specified criteria and procedures.

Industrial Works

import, export, or having in possession must comply with the specified criteria and procedures.

<b>Harmful Chemicals List I</b>	:	Listed
<b>Harmful Chemicals List II</b>	:	Not listed
<b>Safety, health and environmental regulations specific for the product</b>	:	No known specific national and/or regional regulations applicable to this product (including its ingredients).

#### **International regulations** **Chemical inventories**

Australia inventory (AICS) Not determined.  
 Canada inventory At least one component is not listed in DSL but all such components are listed in NDSL.  
 Japan inventory Not determined.  
 China inventory (IECSC) Not determined.  
 Korea inventory Not determined.  
 New Zealand Inventory (NZIoC) All components are listed or exempted.  
 Philippines inventory (PICCS) Not determined.  
 United States inventory (TSCA 8b) All components are listed or exempted.

## **16. Other information**

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