

**DuPont™ Biosolve™ Plus**

Version 3.0

Revision Date 08/03/2012

Ref. 130000028604

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : DuPont™ Biosolve™ Plus
Tradename/Synonym : DuPont™ Biosolve™ Plus Multipurpose Heavy Duty Cleaner

MSDS Number : 130000028604

Product Use : Cleaning agent

Manufacturer : DuPont
1007 Market Street
Wilmington, DE 19898

Product Information : 1-800-441-7515 (outside the U.S. 1-302-774-1000)
Medical Emergency : 1-800-441-3637 (outside the U.S. 1-302-774-1139)
Transport Emergency : CHEMTREC: 1-800-424-9300 (outside the U.S. 1-703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION

Potential Health Effects

Skin : May cause: Corrosion, Effects of skin contacts may include:, Severe skin irritation, Burns.

Eyes : May cause: Severe irritation, Other effects may include:, corneal damage, Impairment of vision, Blindness.

Inhalation : May cause irritation of respiratory tract.

Ingestion : Effects due to ingestion may include: Irritation, Nausea, Diarrhoea, Prolonged contact may cause:, Burns.

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Water	7732-18-5	>75%
Sodium hydroxide	1310-73-2	7 - 13 %
Surfactants		5 - 10 %
Chelating Agent		1 - 5 %

SECTION 4. FIRST AID MEASURES

- Skin contact : In case of contact, immediately flush skin with plenty of water. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Consult a physician if necessary.
- Eye contact : Rinse immediately with plenty of water and seek medical advice.
- Inhalation : Move to fresh air. Consult a physician if necessary.
- Ingestion : Call a poison control center or doctor for treatment advice. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Do not give anything by mouth to an unconscious person.

SECTION 5. FIREFIGHTING MEASURES

- Flammable Properties
- Flash point : > 93 °C (> 199 °F)
Method : Pensky-Martens closed cup - PMCC



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- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Firefighting Instructions : Wear self-contained breathing apparatus (SCBA). Wear suitable protective equipment.
Evacuate personnel to safe areas.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

- Safeguards (Personnel) : Wear suitable protective equipment. Wear respiratory protection.
- Spill Cleanup : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
- Accidental Release Measures : Prevent material from entering sewers, waterways, or low areas.

SECTION 7. HANDLING AND STORAGE

- Handling (Personnel) : Avoid inhalation, ingestion and contact with skin and eyes. Do not get on clothing. Wash off with plenty of water. Wash clothing after use.
Do not breathe vapours or spray mist. When using do not eat, drink or smoke.
- Storage : Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. Keep container closed when not in use.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls : Ensure adequate ventilation.
- Personal protective equipment


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- Respiratory protection : Provide adequate ventilation. Use NIOSH approved respiratory protection.
- Hand protection : Material: Impervious gloves
- Eye protection : Wear coverall chemical splash goggles and face shield when the possibility exists for eye and face contact due to splashing or spraying of material.
- Skin and body protection : Where there is potential for skin contact, have available and wear as appropriate, impervious gloves, apron, pants, jacket, hood and boots.

**Exposure Guidelines
Exposure Limit Values**

Sodium hydroxide			
PEL:	(OSHA)	2 mg/m ³	8 hr. TWA
PEL:	(OSHA)	2 mg/m ³	Ceiling
TLV	(ACGIH)	2 mg/m ³	TLV-C
AEL *	(DUPONT)	2 mg/m ³	15 minute TWA

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: viscous liquid
Color	: blue
Odor	: strong, aliphatic
pH	: 13 - 14
Freezing point	: 0 °C (32 °F)
Boiling point	: 100 °C (212 °F)
% Volatile	: 61 - 63 %
Vapour Pressure	: 760 mm Hg at 100 °C (212 °F)
Density	: 9.34 - 9.51 lb/gal
Density	: 1.12 - 1.14 g/ml

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Specific gravity : 1.13
(Water=1.0)
Water solubility : completely soluble 100%

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid : Stable at normal temperatures and storage conditions.
Incompatibility : Metals Acids, oxidizers
Hazardous decomposition products : Decomposition does not occur under normal use conditions.
Hazardous reactions : Polymerization will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Sodium hydroxide
Oral LD50 : 325 mg/kg , rabbit
Inhalation 2 h LC50 : 1.15 mg/l , rat
Information given is based on data obtained from similar substances.
Skin irritation : Corrosive, animals (unspecified species)
Eye irritation : rabbit
Corrosive
Skin sensitization : human
Patch test on human volunteers did not demonstrate sensitization properties.
Repeated dose toxicity : Inhalation
Respiratory irritation
Oral - drinking water
Reduced growth rate
Mutagenicity : Evidence suggests this substance does not cause genetic damage in

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animals.
Evidence suggests this substance does not cause genetic damage in cultured bacterial cells.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity
Sodium hydroxide
48 h LC50 : Daphnia 33 - 450 mg/l

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal : In accordance with local and national regulations. Do not flush into surface water or sanitary sewer system. Do not contaminate water, food or feed by disposal.

SECTION 14. TRANSPORT INFORMATION

DOT	UN number	: 1824
	Proper shipping name	: Sodium hydroxide solution
	Class	: 8
	Packing group	: II
	Labelling No.	: 8
	Reportable Quantity	: 1,000 lbs Sodium hydroxide
IATA_C	UN number	: 1824
	Proper shipping name	: Sodium hydroxide solution
	Class	: 8
	Packing group	: II
	Labelling No.	: 8
IMDG	UN number	: 1824

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Proper shipping name : SODIUM HYDROXIDE SOLUTION
Class : 8
Packing group : II
Labelling No. : 8

SECTION 15. REGULATORY INFORMATION

TSCA Status : On the inventory, or in compliance with the inventory

SARA 313 Regulated Chemical(s) : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

CERCLA Reportable Quantity : 13,072 lbs
Based on the percentage composition of this chemical in the product.:
Sodium hydroxide

California Prop. 65 : WARNING! This product contains a chemical or chemicals known to the State of California to cause cancer.

PA Right to Know Regulated Chemical(s) : Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances): Sodium hydroxide

NJ Right to Know Regulated Chemical(s) : Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): Sodium hydroxide

SECTION 16. OTHER INFORMATION

		HMIS
Health	:	3
Flammability	:	1
Reactivity/Physical hazard	:	0

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Do not use for medical-clinical purposes.

Contact person : MSDS Coordinator, DuPont Chemicals and Fluoroproducts, Wilmington, DE
19898, (800) 441-7515

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