

# SAFETY DATA SHEET

## FORMULA 100

### SECTION 1- PRODUCT IDENTIFICATION

**PRODUCT NAME** : FORMULA 100  
**SYNONYMS** : Product is a mixture: No synonyms are available.  
**PRODUCT USE** : Moderately Alkaline Material  
**SUPPLIER** : WESMAR CO. INC.  
**SUPPLIER'S ADDRESS** : 5720 204<sup>TH</sup> ST SW, LYNNWOOD, WA 98036  
(206) 783-5344  
**EMERGENCY RESPONSE PHONE** : PERS: 1-800-633-8253



### SECTION 2 – HAZARD IDENTIFICATION

#### CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

**GHS U.S. – CLASSIFICATION** : H302 Harmful if swallowed.  
: H315 Causes skin irritation  
: H319 Causes serious eye irritation

**LABEL ELEMENTS** : **GHS – US HAZARD PICTOGRAMS** The product is classified and labeled according to the Globally Harmonized System (GHS).

**HAZARD PICTOGRAMS** :



**SIGNAL WORD** : WARNING

**HAZARD STATEMENTS (GHS-US)** : H302 Harmful if swallowed.  
: H315 Causes skin irritation.  
: H319 Causes serious eye irritation.

**PRECAUTIONARY STATEMENTS (GHS-US)** : P101 If medical advice is needed, have product container or label at hand.  
: P102 Keep out of reach of children.  
: P103 Read label before use.  
: P264 Wash skin and contaminated clothing thoroughly after handling.  
: P270 Do not eat, drink or smoke when using this product.  
: P280 Wear suitable protective gloves/protective clothing/eye protection/face protection.  
: P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
: P302+P352 : IF ON SKIN: Wash with plenty of soap and water.  
: P305+351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
: P332+P313 If skin irritation occurs: Get medical advice/attention.  
: P337+P313 If eye irritation persists: Get medical advice/attention.  
: P501 Dispose of contents/container in accordance with local/regional/national/international regulations

**OSHA HAZARDS** : Target Organ Effect (Glycol Ether DPM)  
**TARGET ORGANS** : Kidney, Liver, Nerves (Glycol Ether DPM).  
**CLASSIFICATION SYSTEM** : NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme.  
**NFPA RATINGS (SCALE 0-4)** : Health = 2, Fire = 0, Reactivity = 0  
**HMIS RATINGS (SCALE 0-5)** : Health = 2, Fire = 0, Reactivity = 0

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### SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

**CHEMICAL CHARACTERISTIC** : Mixtures  
**DESCRIPTION** : Mixture of the substances listed below with nonhazardous additions.

COMPONENT	PERCENT	CAS #	EINECS #	GHS CLASSIFICATION
Dipropylene glycol methyl ether	5-10	34590-94-8	252-104-2	Eye Irrit: Cat 2B
Potassium Hydroxide	0.1-1.0	1310-58-3	215-181-3	Metal Corr. Cat 1, Skin Corr. Cat. 1A Eye Dam. Cat. 1, Aquatic Acute Cat. 4
Propylene Glycol Butyl Ether	1-5	5131-66-8 & 18821-83-7	225-878-4	Skin Irrit. Cat 2, Eye Irrit. Cat 2A --
Ethylenediamine Tetraacetate Na salt	0.1-1.0	64-02-8	200-573-9	Skin Irrit Cat 2, Eye Dam Cat 2A
Nonylphenol Ethoxylate Phosphate	1-5	51811-79-1	200-432-1	Skin Irrit Cat 2, Eye Irrit Cat 2A
Cocoamidopropyle Betaine	0.1-1.0	61789-40-0	263-058-8	Eye Irrit Cat 2B
Nonylphenol, Ethoxylate	1-5	127087-87-0	500-315-8	Eye Dam Cat 1, Aquatic Hazard (Long Term) Cat 3
Coconut Diethanolamide	1-5	68603-42-9	271-657-0	Skin Irrit Cat 2, Eye Irrit Cat 2B

Irrit. = Irritation, Corr. = Corrosion, Cat. = Category, Dam = Damage, Tox = Toxic, STOT SE = Single Target Organ Toxicity  
 Single exposure.

### SECTION 4 – FIRST AID MEASURES

#### DESCRIPTION OF FIRST AID MEASURES

**GENERAL** : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice. Show the label where possible.

**EYE CONTACT** : Immediately flush eyes with water for at least 15 minutes. Hold eyelids open to ensure adequate flushing. Get immediate medical attention.

**SKIN CONTACT** : Remove contaminated clothing and shoes. Wash affected skin area with soap and water. Delayed skin damage is possible if product is not completely washed off. Get immediate medical attention.

**SWALLOWING (INGESTION)** : If ingested, dilute swallowed material by drinking water. **DO NOT INDUCE VOMITING.** If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops. Never give anything by mouth to an unconscious person. Get immediate medical attention.

**INHALATION** : Remove to fresh air. Get immediate medical attention.

**OTHER INSTRUCTIONS** : Rescue personnel must wear appropriate protective equipment during removal of victims from contaminated areas. Treat symptomatically and supportively.

### SECTION 5 – FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA** : Dry chemical, foam, water or carbon dioxide.

**SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS** : In the event of a fire, wear a NIOSH (USA) or CEN (EU) approved, positive pressure, self-contained breathing apparatus (SCUBA) and full protective clothing. Evacuate all non-essential personnel from the danger area.

**UNUSUAL FIRE AND EXPLOSION HAZARDS** : No further relevant information is available.

### SECTION 6 – ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT & EMERGENCY PROCEDURES** : Restrict access to keep out unauthorized or unprotected personnel. Wear protective equipment. Avoid inhalation and direct contact.

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- ENVIRONMENTAL PROCEDURES** : Keep spilled material away from sewage/drainage systems and waterways.
- METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP** : All clean-up personnel must be properly trained. Confine the spill and remove incompatible materials and ignition sources. Ensure adequate ventilation. Secure the source of the leak if conditions are safe. Neutralize spill and collect using an appropriate absorbent material such as clay or vermiculite. Place waste in an appropriate container for disposal. Use care during clean-up to avoid exposure to the material and injury from broken containers.

### SECTION 7 – HANDLING AND STORAGE

- PRECAUTIONS FOR SAFE HANDLING** : Use with adequate ventilation. Wear proper protective equipment. Do not mix with water or acids without proper dilution and agitation to prevent a potentially violent reaction.
- CONDITIONS FOR SAFE STORAGE** : Store in closed, properly labeled containers. Protect containers from heat, physical damage, ignition sources and incompatible materials. Have emergency equipment for fires and spills readily available.



### SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

- TLV (THRESHOLD LIMIT VALUE)** : The TLV in section in section III is the ACGIH/TLV-TWA (threshold limit value/time weighted average concentration for an eight hour work day). The STEL is the short term exposure limit and the (Ceil) is the ceiling limit.

COMPONENT	OSHA PEL – TWA	ACGIH – TLV	ACGIH – STEL
Dipropylene glycol methyl ether	100 ppm, 600mg/m <sup>3</sup>	100 ppm	150 ppm
Potassium Hydroxide	2 mg/m <sup>3</sup> (Ceiling)	Not Established	2 mg/m <sup>3</sup> (Ceiling)
Propylene Glycol Butyl Ether	Not Established	Not Established	Not Established
Ethylenediamine Tetraacetate	Not Established	Not Established	Not Established
Nonylphenol Ethoxylate Phosphate	Not Established	Not Established	Not Established
Cocoamidopropyle Betaine	Not Established	Not Established	Not Established
Nonylphenol, Ethoxylate	Not Established	Not Established	Not Established
Coconut Diethanolamide	Not Established	Not Established	Not Established

- EYE PROTECTION** : Wear chemical splash goggles or face shield.
- SKIN PROTECTION** : Minimize contact with product. Wear chemical resistant coveralls, boots, gloves, apron and/or suitable long-sleeved clothing.
- RESPIRATORY PROTECTION** : In case of brief exposure use respiratory filter device. In case of intensive or longer exposure, use respiratory protective device that is independent of circulating air.
- VENTILATION** : Ensure adequate ventilation.
- ADDITIONAL MEASURES** : Emergency eyewash and safety shower facilities should be available in the immediate work area.
- REQUIRED WORK/HYGIENE** : Wash hands thoroughly after handling. Keep away from all food stuffs, beverages and feed. Do not eat, drink or smoke in work area.

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- APPEARANCE** : Clear blue liquid.
- ODOR** : Mild odor.
- ODOR THRESHOLD** : Not available
- PH** : 11.3 - 11.9 AS IS

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MELTING POINT/FREEZING POINT	: Not available
BOILING POINT	: Approx. 212° F.
FLASH POINT	: Non flammable, non combustible
EVAPORATION RATE	: Not available
FLAMMABILITY	: Non flammable-Non combustible
LOWER FLAMMABILITY LIMIT	: Not available
UPPER FLAMMABILITY LIMIT	: Not available
VAPOR PRESSURE	: Not available
VAPOR DENSITY (AIR=1)	: Not available
RELATIVE DENSITY	: 1.01
SOLUBILITY IN WATER	: Soluble in water
PARTITION COEFFICIENT n-OCTANOL/WATER	: Not available
AUTOIGNITION TEMPERATURE	: Not available
DECOMPOSITION TEMPERATURE	: Not available

#### SECTION 10 – STABILITY AND REACTIVITY

STABILITY	: Stable under recommended storage conditions.
HAZARDOUS CONDITIONS TO AVOID	: No decomposition if used according to specifications
INCOMPATIBLE MATERIALS	: Keep away from strong acids.
HAZARDOUS DECOMPOSITION PRODUCTS	: No dangerous decomposition products known.

#### SECTION 11 – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION	: <b>Dipropylene Glycol Methyl Ether</b>
ACUTE TOXICITY	: LD50 values: Oral LD50: 5152 mg/kg (rat). LC50 dermal and inhalation: Not listed. Eyes: Rabbit: Mild Irritation: 25 hours.
CARCINOGENICITY	: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC, ACGIH, NTP, and OSHA.
TOXICOLOGICAL INFORMATION	: <b>Potassium Hydroxide</b>
ACUTE TOXICITY	: Draize test, rabbit, skin: 50 mg/24H Severe; Oral, rat: LD50 = 273 mg/kg;   LD50 values: Potassium Hydroxide: Oral (rat): 214 mg/kg. LC50 dermal and inhalation: Not listed.
EYE CONTACT	: Causes severe eye damage.
SKIN CONTACT	: Causes skin burns. Onset of symptoms may be delayed following exposure.
INHALATION	: Corrosive to respiratory tract.
INGESTION	: May be harmful if swallowed. Ingestion may cause chemical burns, pain, vomiting, difficulty breathing and other gastrointestinal effects.
CARCINOGENICITY	: The components of this product are not classified as carcinogenic by OSHA, NTP IARC or CA Prop 65.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE	: Asthma and other respiratory conditions, skin disorders.
TOXICOLOGICAL INFORMATION	: <b>Propylene Glycol Butyl Ether</b>
ACUTE TOXICITY	: LD 50 Rat: 2,200 mg/kg
ACUTE INHALATION TOXICITY	: No data available
ACUTE DERMAL TOXICITY	: LD 50 Rabbit: 3,100 mg/kg

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**TOXICOLOGICAL INFORMATION** : **Ethylenediamine Tetraacetate**  
**ACUTE TOXICITY** : LD50 Oral (rat): 630 - 1,260 mg/kg,  
**INHALATION LC50** : No data available  
**DERMAL LD50** : No data available  
**OTHER INFORMATION ON ACUTE TOXICITY** : No data available

**TOXICOLOGICAL INFORMATION** : **Nonylphenol Ethoxylate Phosphate**  
**ACUTE TOXICITY** : LD50 Oral (rat): 5000-15,000 mg/kg,  
**INHALATION LC50** : No data available  
**DERMAL LD50** : No data available  
**CARCINOGENICITY** : This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA.  
**MUTAGENICITY** : Not mutagenic in AMES test.

**TOXICOLOGICAL INFORMATION** : **Cocoamidopropyl Betaine**  
**ACUTE TOXICITY** : LD50 Oral (rat): 5000-15,000 mg/kg.  
**INHALATION LC50** : No data available  
**DERMAL LD50** : No data available  
**CARCINOGENICITY** : This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA.  
**MUTAGENICITY** : Not mutagenic in AMES test.

**TOXICOLOGICAL INFORMATION** : **Nonylphenol, Ethoxylated**  
**ACUTE TOXICITY** : LD50 Oral (rat): 3,989-5,000 mg/kg,  
**INHALATION LC50** : No data available.  
**DERMAL LD50** : LD50 Dermal (rabbit): 3,228-5,000 mg/kg.  
**SENSITIZATION SKIN** : For this family of materials: Did not cause allergic skin reactions when tested in humans.  
**REPEATED DOSE TOXICITY** : For this family of materials: In animals, effects have been reported on the following organs: Heart.

**TOXICOLOGICAL INFORMATION** : **Coconut Diethanolamide**  
**ACUTE TOXICITY** : LD50 Oral (rat): > 5,000 mg/kg, LD50 Dermal (rabbit): > 2000 mg/kg.  
**ACUTE EFFECTS** : May be harmful in contact with skin.  
**CHRONIC EFFECTS** : Hazardous by OSHA criteria. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. May cause damage to organs through prolonged or repeated exposure.  
**SYMPTOMS AND TARGET ORGANS** : Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain

<b>SECTION 12 – ECOLOGICAL INFORMATION</b>
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**ECOLOGICAL INFORMATION** : **Dipropylene Glycol Methyl Ether**  
**ECOTOXICITY (aquatic and terrestrial, where available):**  
**ACUTE FISH TOXICITY** : LC50 / 96 hours Fathead Minnow - >10,000 mg/L  
**TOXICITY TO DAPHNIA** : EC50 / 48 hours Water flea - 1,919 mg/L  
**PERSISTENCE AND DEGRADABILITY** : No data available.  
**BIOACCUMULATIVE POTENTIAL** : No data available.

**ECOLOGICAL INFORMATION** : **Potassium Hydroxide**  
**ECOTOXICITY** : Fish: Mosquito Fish: LC50 = 80.0 mg/L; 24 Hr.; Unspecified No data available.  
**ENVIRONMENTAL PHYSICAL** : No information found.  
**OTHER** : No relevant information available.  
**PERSISTENCE AND** : No relevant information available.

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### DEGRADABILITY

**BIOACCUMULATIVE POTENTIAL** : No relevant information available.

**NOTES** : Water hazard class 1 (Self assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of this product to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or un-neutralized. Rinse off larger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms.

**ECOLOGICAL INFORMATION** : **Propylene Glycol Butyl Ether**

**ECOTOXICITY: TOXICITY TO FISH** : No data available

**TOXICITY TO DAPHNIA** : No data available

**TOXICITY TO ALGAE** : No data available

**TOXICITY TO BACTERIA** : No data available

**ECOLOGICAL INFORMATION** : **Ethylenediamine Tetraacetate**

**ECOTOXICITY** : No data available.

**PERSISTENCE AND DEGRADABILITY** : No data available.

**BIOACCUMULATIVE POTENTIAL** : No data available.

**ECOLOGICAL INFORMATION** : **Nonylphenol Ethoxylate Phosphate**

**ECOTOXICITY** : Not available

**PERSISTENCE AND DEGRADABILITY** : No data available

**BIOACCUMULATIVE POTENTIAL** : No data available

**ECOLOGICAL INFORMATION** : **Cocoamidopropyl Betaine**

**ECOTOXICITY** : Not available

**PERSISTENCE AND DEGRADABILITY** : No data available

**BIOACCUMULATIVE POTENTIAL** : No data available

**ECOLOGICAL INFORMATION** : **Ethoxylated Alcohol**

**ECOTOXICITY** : For this family of materials: Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in most sensitive species tested).

**FISH ACUTE AND PROLONGED TOXICITY** : For this family of materials: LC50, fathead minnow (*Pimephales promelas*), 96 h: 1.6 - 24 mg/l

**AQUATIC INVERTEBRATE ACUTE TOXICITY** : For this family of materials: LC50, water flea *Daphnia magna*, 48 h: 23.1 - 71.8 mg/L  
For this family of materials: EC50, water flea *Daphnia magna*, 48 h, immobilization: 23.1 mg/L.

**PERSISTENCE AND DEGRADABILITY** : No data available For this family of materials: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

**ECOLOGICAL INFORMATION** : **Coconut Diethanolamide**

**ACUTE TOXICITY** : LC50 Algae: < 10 mg/l 72 hours, LC50 *Daphnia*: < 10 mg/l 48 hours, LC50 Fish: < 10 mg/l 96 hours

**PERSISTENCE AND DEGRADABILITY** : Readily biodegradable

**BIOACCUMULATIVE POTENTIAL** : No data available.

### SECTION 13 – DISPOSAL CONSIDERATIONS

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**WASTE DISPOSAL** : This product must be disposed of in accordance with Federal, state and local environmental regulations. Discarded materials may be considered hazardous waste due to pH/corrosivity. It is the responsibility of the product user to determine at the time of disposal whether a material containing, or derived from this product, should be classified as a hazardous waste.

### SECTION 14 – TRANSPORTATION INFORMATION

**DOT/IMDG/ IATA PROPER SHIPPING NAME** : Not Hazardous  
**HAZARD CLASS AND LABEL UN NUMBER** : Not Applicable.  
**PACKAGING GROUP** : Not Applicable.  
**EPA REPORTABLE QUANTITY (RQ)** : Not Applicable.  
**MARINE POLLUTANT** : Not listed.  
**EMERGENCY RESPONSE GUIDE** : Not Applicable.

### SECTION 15 – REGULATORY INFORMATION

**U.N. GHS CLASSIFICATION & LABELING INFORMATION:** See Section 2 for GHS Hazard Information

#### U.S. FEDERAL REGULATORY INFORMATION:

**LISTED CARCINOGEN** : Not listed.  
**TSCA STATUS** : The ingredients of this product are listed in TSCA inventory (40CFR 710.)  
**SARA SECTION 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.  
**SARA SECTION 312** : Chronic health hazard (Glycol Ether DPM).  
**SARA SECTION 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** : No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA.  
**NFPA HEALTH** : 2  
**NFPA FLAMMABILITY** : 0  
**NFPA REACTIVITY** : 0

#### EUROPEAN UNION REGULATORY INFORMATION:

**EC CLASSIFICATION** : Xi: Irritant  
**DSD/DPD RISK (R) PHRASES** : R22: Harmful if swallowed.  
R36/38: Irritating to eyes and skin.  
**DSD/DPD SAFETY (S) PHRASES** : S1/2: Keep locked up and out of reach of children.  
S24/25: Avoid contact with eyes and skin.  
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S36/S37/39: Wear suitable protective clothing, gloves and eye/face protection.  
S45: In case of accidents or if you feel unwell, seek medical advice immediately. Show label where possible.  
S61: Avoid release to the environment.  
S62: If swallowed, do not induce vomiting.  
S64: If swallowed, rinse mouth with water if victim is conscious.  
**DSD/DPD HAZARD SYMBOL** : Xi: Irritant



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### CANADIAN REGULATORY INFORMATION:

**WHMIS CATEGORY** : D2B: Materials that cause other toxic effects (TOXIC).  
**DOMESTIC SUBSTANCES LIST (DSL)** : Listed  
**INGREDIENT DISCLOSURE LIST** : Listed



### SECTION 16 – OTHER INFORMATION

**DISCLAIMER** : The information contained herein has been compiled from sources believed to be reliable and accurate to the best of our knowledge at this date. It is provided without warranty, expressed or implied, as to the results of use of this information or to the product to which it relates. Wesmar Co. assumes no responsibility for injury to any person or property resulting from any use of the material. Each user assumes the risk in their use of this product and should review the data and recommendations in the specific context of their intended use.

**CERCLA** : Comprehensive Environmental Response, Compensation, and Liability Act.  
**EINECS** : European Inventory of Existing Commercial Chemical Substances  
**IMDG** : International Maritime Code for Dangerous Goods  
**IARC** : International Agency for Research on Cancer  
**IATA** : International Air Transportation Association  
**ACGIH** : American Conference of Governmental Industrial Hygienists  
**NFPA** : National Fire Protection Association (USA)  
**NTP** : National Toxicology Program  
**SARA** : Superfund Amendments and Reauthorization Act  
**TSCA** : Toxic Substances Control Act  
**HMIS** : Hazardous Materials Identification System (USA)  
**WHMIS** : Workplace Hazardous Materials Information System  
**LC50** : Lethal concentration, 50 percent  
**LD50** : Lethal dose, 50 percent  
**STOT** : Systemic Target Organ Toxicity  
**DATE PREPARED** : MAR 1, 2006  
**DATE REVISED** : MAR 1, 2015