WM 5301, WM 5302
WM 5303, WM 5305

Safety Data Sheet
FORMULA 200

SECTION 1- PRODUCT IDENTIFICATION

PRODUCT NAME	FORMULA 200
SYNONYMS	Product is a mixture: No synonyms are available
PRODUCT USE	Alkaline Material
SUPPLIER	Wesmar Co. Inc.
SUPPLIER'S ADDRESS	5720 204TH ST SW, Lynnwood, WA 98036 (206) 783-5344
EMERGENCY RESPONSE PHONE	PERS: 1-800-633-8253

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SECTION 2 – HAZARD IDENTIFICATION

GHS – US CLASSIFICATION

:	H290	Metal corrosion Category 1
:	H314	Skin Corrosion Category 1B
:	H318	Serious Eye Damage Category 1B
:	H412	Aquatic Acute Category 3

HAZARD PICTOGRAMS :

SIGNAL WORD : **DANGER**

GHS LABEL ELEMENTS : The product is classified and labeled according to the Globally Harmonized System (GHS).

GHS PHYSICAL HAZARDS

:	H290	May be corrosive to metals.
:	H314	Causes severe skin burns and eye damage.
:	H318	Causes serious eye damage.
:	H412	Harmful to aquatic life with long lasting effects.

GHS PRECAUTIONARY HAZARDS

:	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.
	P260	Do not breathe dust/fume/gas/mist/vapors/spray.
	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+P330 +P331	IF SWALLOWED. Rinse mouth. Do NOT induce vomiting.
	P303+P361 +P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
:	P305+P351 +P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
:	P305+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position.
:	P310	Immediately call a POISON CENTER or doctor/physician.
:	P330	Rinse mouth if ingested.
:	P405	Store locked up.
:	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 = 3, Fire = 0, Reactivity = 1

HMIS ratings (scale 0-5): : Health = 3, Fire = 0, Reactivity = 1

SECTION 3 – COMPOSITON/INFORMATION ON INGREDIENTS

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

COMPONENT	PERCENT	CAS #	EC #	GHS CLASS
Potassium Hydroxide	1-5	1310-58-3	215-181-3	Metal Corr. Cat 1, Skin Corr Cat 1B Eye Dam Cat 1, Acute Tox (Oral) Cat 4
Dipropylene glycol methyl ether	1-5	34590-94-8	252-104-2	Eye Irrit: Cat 2B
Ethylenediaminet Tetraacetate Tetrasodium Salt (edta)	0.1-2	64-02-8	200-573-9	Eye Dam Cat 1, Acute Tox (Oral) Cat4 Acute Aquatic Cat 2, Acute Tox (Inhal) Cat4
Nonylphenol Ethoxylate Phosphate	0.1-2	51811-79-1	200-432-1	Skin Irrit Cat 2, Eye Irrit Cat 2A
Cocoamidopropyle Betaine	0.1-2	61789-40-0	263-058-8	Eye Irrit Cat 2B
Sodium Xylene Sulfonate	1-5	1300-72-7	215-090-9	Skin Irrit Cat 2, Eye Irrit Cat 2A
Alcohol Ethoxylate N-12	0.1-2	127087-87-0	500-315-8	Eye Dam Cat 1
Coconut Diethanolamide	1-5	68603-42-9	271-657-0	Skin Irrit Cat 2, Eye Irrit Cat 2B

Corr. = Corrosion, Dam. = Damage, Tox = Toxic, Irrit = Irritation, Cat = Category

SECTION 4 – FIRST AID MEASURES

EYE CONTACT : Immediately flush eyes with water for at least 15 minutes. Hold eyelids open to ensure adequate flushing. Remove contact lenses, if present and easy to do so. Continue rinsing. Immediate call a POISON CENTER or doctor/physician.

SKIN CONTACT : Remove contaminated clothing and shoes. Wash affected skin area with water for at least 15 minutes. Delayed skin damage is possible if product is not completely washed off. Get immediate medical attention. Wash contaminated clothing before reuse.

SWALLOWING (INGESTION) : If ingested, dilute swallowed material by drinking water. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Immediate call a POISON CENTER or doctor/physician.

INHALATION : When symptoms occur, go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER/doctor/physician.

GENERAL MEASURES : Never give anything by mouth to an unconscious person. 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 FIREFIGHTER : 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 AND EMERGENCY PROCEDURES : Restrict access to keep out unauthorized or unprotected personnel. Wear protective equipment. Avoid inhalation and direct contact.

ENVIRONMENTAL PRECAUTIONS : Keep spilled material away from sewage/drainage systems and waterways. This

product contains a U.S. EPA Reportable Quantity (RQ) substance. If amounts exceeding the Reportable Quantity are released, notification of the National Response Center (800) 424-8802 is required. See section15 for more information.

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-Ceiling	ACGIH – STEL
Potassium Hydroxide	2 mg/m^3 (Ceiling)	$2mg/m^3$	$2mg/m^3$ (Ceiling)
Dipropylene glycol methyl ether	100 ppm, $600mg/m^3$	100 ppm	150 ppm
Ethylenediamine Tetraacetate Na Salt	Not Established	Not Established	Not Established
Nonylphenol Ethoxylate Phosphate PBC	Not Established	Not Established	Not Established
Cocoamidopropyle Betaine	Not Established	Not Established	Not Established
Sodium Xylene Sulfonate	Not Established	Not Established	Not Established
Alcohol Ethoxylate N-12	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 fluorescent green liquid with mild odor

ODOR	:	Mild odor
ODOR THRESHOLD	:	Not available
PH	:	> 13.5
MELTING POINT/FREEZING POINT	:	Not available
BOILING POINT	:	Not available
FLASHPOINT	:	Non flammable, non combustible
EVAPORATION RATE	:	Not available
FLAMMABILITY	:	Not applicable
LOWER FLAMMABILITY LIMIT	:	Not applicable
UPPER FLAMMABILITY LIMIT	:	Not applicable
VAPOR PRESSURE	:	Not available
VAPOR DENSITY (AIR=1)	:	Not available
RELATIVE DENSITY	:	1.05
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	:	**Potassium Hydroxide**
ACUTE TOXICITY	:	LD50 Oral (rat): 214 mg/kg, LD50 Dermal: Not Determined. LC50 Inhalation: Not determined. When in solution, this material will affect all tissues with which it comes in contact. The severity of the tissue damage is a function of its concentration, the length of tissue contact time, and local tissue conditions. After exposure there may be a time delay before irritation and other effects occur. This material is a strong irritant and is corrosive to the skin, eyes, and mucous membranes. This material may cause severe burns and permanent damage to any tissue with which it comes into contact.
CARCINOGENICITY	:	This product is not classified as a carcinogen by NTP, IARC or OSHA.
TOXICOLOGICAL INFORMATION	:	**Dipropylene Glycol Methyl Ether**
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	:	**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	:	**Sodium Xylene Sulfonate**
ROUTES OF ENTRY	:	Absorbed through skin and/or eye contact.
ACUTE TOXICITY	:	LD50 Oral (rat): 2500 mg/kg,
CHRONIC EFFECTS ON HUMANS	:	Contains material which may cause damage to the following organs: liver
SPECIAL REMARKS ON TOXICITY TO ANIMALS	:	TDL (rat): Route: skin; Dose: 3380 mg/kg/17D intermittent; Toxic effects: changes in liver weight TDL (rat): Route: skin; Dose: 35 gm/kg/14W intermittent; Toxic effects: dermatitis, other (skin and appendages). (Sodium Xylene Sulfonate).
TOXICOLOGICAL INFORMATION	:	**Ethoxylated Alcohol N-12**
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

SECTION 12 – ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION	:	**Potassium Hydroxide**
AQUATIC TOXICITY	:	This material is alkaline and may raise the pH of surface waters with low buffering capacity. This material has exhibited moderate toxicity to aquatic organisms.
FRESHWATER FISH TOXICITY	:	LC50 (Mosquito fish): 80 mg/L/96 hr (static bioassay in fresh water at 18-19 C) LC50 (Fathead Minnow): 179 mg/L/96 hr (static at 22.3-24.7 C)
INVERTEBRATE TOXICITY	:	EC50 (Daphnia magna): 60 mg/L/48 hr (static bioassay at 20.3-20.7 C)
FATE & TRANSPORT	:	This material will disassociate into ionic form in the aquatic environment. Natural carbon dioxide will slowly neutralize this material.
BIODEGRADATION		
BIOCONCENTRATION	:	This material does not bio-concentrate.
ADDITIONAL ECOLOGICAL	:	This material has exhibited slight toxicity to terrestrial organisms.

INFORMATION

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	:	**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	:	**Sodium Xylene Sulfonate**
ECOTOXICITY	:	Not available
BOD5 AND COD	:	Not available
PRODUCTS OF BIODEGRADATION	:	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
TOXICITY OF THE PRODUCTS OF BIODEGRADATION	:	: The product itself and its products of degradation are not toxic.

ECOLOGICAL INFORMATION	:	**Ethoxylated Alcohol NP-12**
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 PROLNGED 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

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	:	UN-1814, POTASSIUM HYDROXIDE, SOLUTION 8, PG-II
HAZARD CLASS AND LABEL	:	8 (Corrosive)
UN NUMBER	:	UN 1814
PACKAGING GROUP	:	PG-II
EPA REPORTABLE QUANTITY (RQ)	:	1000 LBS. (454 KG) as Potassium Hydroxide 100%.
MARINE POLLUTANT	:	Not listed.
EMERGENCY RESPONSE GUIDE	:	ERG-154

SECTION 15 – REGULATORY INFORMATION

U.S. FEDERAL REGULATORY INFORMATION:

LISTED CARCINOGEN	:	Not listed
TSC STATUS	:	The ingredients of this product are listed on TSCA (Toxic Substances Control Act) inventory (40CFR 710.)
SARA SECTION 302	:	**EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355, APPENDIX A):** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA SECTION 311 HAZARD CATEGORIES (40 CFR 370):	:	Immediate (acute) health hazard. (Dipropylene glycol methyl ether).
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.
NFPA HEALTH	:	3
NFPA FLAMMABILITY	:	0
NFPA REACTIVITY	:	1

EUROPEAN UNION REGULATORY INFORMATION:

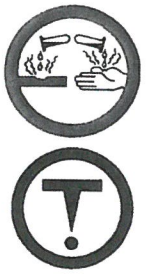
EC CLASSIFICATION	:	C: Corrosive, Xn: Harmful.
DSD/DPD RISK (R) PHRASES	:	R34: Causes severe burns. R22: Harmful is swallowed.
DSD/DPD SAFETY (S) PHRASES	:	S1/2: Keep locked up and out of reach of children. S18: Handle and open containers with care. S26: In case of contact with eyes, rinse immediately 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.
S64: If swallowed, rinse mouth with water if victim is conscious.

DSD/DPD HAZARD SYMBOL : C: Corrosive, Xn: Harmful

CANADIAN REGULATORY INFORMATION

WHMIS CATEGORY : Class E: Corrosive, Class D2B: Materials that cause other toxic effects (TOXIC).



DOMESTIC SUBSTANCES LIST (DSL) : Listed

INGREDIENT DISCLOSURE LIST : Listed, This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the sds contains all of the information required by the CPR.

SECTION 16 – OTHER INFORMATION

DISCLAIMER : The information contained herein has been compiled from sources believed to be realiable 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
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