#### **SECTION 1- PRODUCT IDENTIFICATION**

**PRODUCT NAME** DR-52-LF

**SYNONYMS** Product is a mixture: No synonyms are available

PRODUCT USE Highly 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**

GHS – US CLASSIFICATION : H290 Metal corrosion Category 1

H302 Harmful if swallowed

Skin Corrosion Category 1A

Serious Eye Damage Category 1

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.

GHS HEALTH HAZARDS : H302 Harmful if swallowed

: H314 Causes severe skin burns and eye damage.

: H318 Causes serious eye damage.

: H370 Causes damage to respiratory system by inhalation.

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+P310 IF SWALLOWED: Immediately call a POISON CENTER or

doctor/physician.

: P303+P361 IF ON SKIN (or hair): Remove/Take off immediately all contaminated

+P353 clothing. Rinse skin with water/shower.

: P305+P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove

+P338 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.

**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
Sodium Hydroxide	60-80	1310-73-2	215-185-5	Metal Corr Cat 1, Skin Corr. Cat. 1A
				Eye Dam. Cat. 1, Aquatic Acute Cat 3
Sodium Metasilicate	5-10	6834-92-0	229-912-9	Skin Corr: Cat 1C, Eye Corr. Cat 1
Sodium Tripolyphosphate	5-10	7758-29-4	231-838-7	Skin & Inhalation Irrit. Cat 4
Trisodium Phosphate Crystals	1-5	10101-89-0	Not Found	Skin Irrit Cat 2
Sodium Gluconate	10-20	527-07-1	208-407-7	Not Found
Sodium Carbonate	5-10	497-19-8	207-838-8	Skin Irrit. Cat 2, Eye Irrit. Cat 2A
Sodium dodecyl diphenyl oxide	0.1-1	119345-04-9	Not	Not Found
disulfonate			Available	

Corr. = Corrosion, Dam. = Damage, Cat = Category, Tox = Toxicity, Irrit = Irritant. Also contains non hazardous biodegradable surfactant(s).

#### **SECTION 4 - FIRST AID MEASURES**

EYE CONTACT	:	<b>Immediately</b>	flush e	eyes	with	water	for	at	least	15	minutes.	Hold	eyelids	open to	o
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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. Never give anything by mouth to an unconscious person. Get

immediate medical attention.

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

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** : Water spray, fog, carbon dioxide, foam, dry chemical

SPECIAL HAZARDS (FIRE) : Not flammable. Contains sodium hypochlorite which may act as an oxidizer in some

cases intensifying a fire.

**EXPLOSION HAZARDS**: Product is not explosive.

**REACTIVITY (FIRE)** : Thermal decomposition generates: Corrosive vapors. If the product is involved in a

fire, it can release explosive hydrogen gas. When heated to decomposition, emits

toxic fumes. May be corrosive to metals.

SPECIAL INSTRUCTIONS TO FIRE FIGHTERS

**PRECAUTIONARY MEASURES**: Exercise caution when fighting any chemical fire.

**FIREFIGHTING INSTRUCTIONS**: Use water spray or fog for cooling exposed containers.

**PROTECTION DURING** : Do not enter fire area without proper protective equipment, including respiratory

**FIREFIGHTING** protection.

**HAZARDOUS COMBUSTION**: Potassium oxides. May liberate toxic gases. Sodium oxides. Phosphorous oxides.

**PRODUCTS** Nitrogen oxides. Carbon oxides (CO, CO<sub>2</sub>). Explosive Hydrogen gas.

**OTHER INFORMATION (FIRE)** 

: Do not allow run-off from fire fighting to enter drains or water courses.

#### **SECTION 6 – ACCIDENTAL RELEASE MEASURES**

PERSONAL PRECAUTIONS,
PROTECTIVE EQUIPMENT AND
EMERGENCY PROCEDURES
ENVIRONMENTAL PRECAUTIONS

- : Restrict access to keep out unauthorized or unprotected personnel. Wear protective equipment. Avoid inhalation and direct contact.
  - 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

: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling.

CONDITIONS FOR SAFE STORAGE

Store in a dry, cool and well ventilated place. Keep container closed when not in use. Keep/store away from extremely high or low temperatures, direct sunlight, heat and incompatible materials (Strong acid, Strong oxidizers).









#### **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	<b>ACGIH TLV-Ceiling</b>	ACGIH – STEL
Sodium Hydroxide	2 mg/m³ (Ceiling)	$2 \text{mg/m}^3$	2mg/m <sup>3</sup> (Ceiling)
Sodium Metasilicate	8hr Recommended:	Not Established	Not Established
	3mg/m <sup>3</sup>		
Sodium Tripolyphosphate	Not Established	Not Established	Not Established
Trisodium Phosphate Crystals	Not Established	Not Established	Not Established
Sodium Gluconate	Not Established	Not Established	Not Established
Sodium Carbonate	Not Established	Not Established	Not Established
Sodium dodecyl diphenyl oxide disulfonate	Not Established	Not Established	Not Established

EYE PROTECTION SKIN PROTECTION

: Wear chemical splash goggles or face shield.

: 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.

Wash hands thoroughly after handling. Keep away from all food stuffs, beverages REQUIRED WORK/HYGIENE

and feed. Do not eat, drink or smoke in work area.

#### **SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE** White free flowing powder with mild odor.

ODOR Mild odor Not available ODOR THRESHOLD > 13.5 Not available MELTING POINT/FREEZING

POINT

**BOILING POINT** Not available **FLASHPOINT** Not applicable **EVAPORATION RATE** Not available

Non flammable, Non combustible **FLAMMABILITY** 

**LOWER FLAMMABILITY LIMIT** Not applicable **UPPER FLAMMABILITY LIMIT** Not applicable Not available **VAPOR PRESSURE** : Not available **VAPOR DENSITY (AIR=1)** 

**RELATIVE DENSITY** > 1.0

**SOLUBILITY IN WATER** Soluble in water PARTITION COEFFICIENT n-Not available

OCTANOL/WATER

**AUTOIGNITION TEMPERATURE** Not available DECOMPOSITION TEMPERATURE : Not available

#### **SECTION 10 - STABILITY AND REACTIVITY**

REACTIVITY Thermal decomposition generates: Corrosive vapors. If the product is involved in a

fire, it can release explosion hydrogen gas. When heated to decomposition, emits

toxic fumes. May be corrosive to metals.

**STABILITY** Stable under recommended storage conditions.

HAZARDOUS CONDITIONS TO Direct sunlight. Extremely high or low temperatures. Heat. Combustible materials.

**AVOID** 

**INCOMPATIBLE MATERIALS** 

HAZARDOUS DECOMPOSITION

**PRODUCTS** 

Incompatible materials.

Strong acids. Strong oxidizers. Soft metals. May be corrosive to metal.

Carbon oxides (CO, CO<sub>2</sub>). Thermal decomposition generates: Corrosive vapors. Toxic

gases. Hydrogen gas. Nitrogen oxides. Phosphorous oxides. Sodium oxides.

Potassium oxides.

#### **SECTION 11 – TOXICOLOGICAL INFORMATION**

TOXICOLOGICAL INFORMATION : Sodium Hydroxide

**ACUTE TOXICITY** Draize test, rabbit, eye: 400 ug Mild;

Draize test, rabbit, eye: 1% Severe;

Draize test, rabbit, eye: 50 ug/24H Severe; Draize test, rabbit, eye: 1 mg/24H Severe; Draize test, rabbit, skin: 500 mg/24H Severe

**EYE CONTACT** : Causes severe eye damage.

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**SKIN CONTACT**: Causes skin burns. Onset of symptoms may be delayed following exposure.

INHALATION : Corrosive to respiratory tract.
INGESTION : Corrosive to respiratory tract.

CARCINOGENICITY : The components of this product are not classified as carcinogenic by OSHA, NTP

IARC or CA Prop 65

TOXICOLOGICAL INFORMATION : Sodium Metasilicate

ACUTE TOXICITY : LD50 Oral: 1280mg/kg (Rat), 2400mg/kg (mouse)

CHRONIC TOXICITY : No data were available regarding chronic exposure, reproductive or teratological

effects, or carcinogenicity for sodium metasilicate.

**CARCINOGENICITY** : This product is not classified as a carcinogen by NTP, IARC or OSHA.

TOXICOLOGICAL INFORMATION :

ACUTE TOXICITY

: Sodium Tripolyphosphate

: Oral - rat LD50 - 5,400 mg/kg; practically non-toxic

Dermal - rabbit LD50 - > 7,940 mg/kg; practically non-toxic

Eye Irritation - rabbit - 3.3/110.0; slightly irritating Skin Irritation - rabbit - 0-0/8.0 (24-hr exp.); not irritating

Inhalation - LC50 > 0.39 mg/L (rat, 4 hr) (maximum attainable concentration)

TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY** 

**Trisodium Phosphate Crystals** 

Oral - rat LD50: 6,500 mg/kg; practically nontoxic

Dermal - rabbit LD50: > 7,940 mg/kg; practically nontoxic

Eye Irritation - rabbit (4-hr exp.): corrosive

Skin Irritation - rabbit: 3.3/8.0; moderately irritating

TOXICOLOGICAL INFORMATION : Sodium Gluconate

ACUTE TOXICITY

LD50: Not available, LC50: Not available.

**CHRONIC EFFECTS ON HUMANS** 

**ON HUMANS**: Not available.

OTHER TOXIC EFFECTS ON HUMANS

Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of

inhalation.

TOXICOLOGICAL INFORMATION : Sodium Carbonate

**ACUTE TOXICITY** 

**ACUTE TOXICITY** 

: Not Classified. LD50 values: Oral LD50: 4090mg/kg (rat).

Eye and skin irritant, Ingestion and Inhalation: Unknown

SKIN CORROSION/IRRITATION

SKIN CORROSION/IRKITATIO

**SERIOUS EYE** 

Causes skin irritation.

DAMAGE/IRRITATION

Causes serious eye irritation.

**TOXICOLOGICAL INFORMATION** 

: Sodium dodecyl diphenyl oxide disulfonate

**CHRONIC TOXICITY** : No information available.

. No information available.

**CARCINOGENICITY** : This product is not listed as a human carcinogens by IARC, ACGIH, NTP or OSHA.

### **SECTION 12 – ECOLOGICAL INFORMATION**

ECOLOGICAL INFORMATION : Sodium Hydroxide

**ECOTOXICITY** : Immobilization EC50/48h/Daphnia-40.38 mg/l. LC50 /96h/Mosquito fish-125 mg/l.

**ENVIRONMENTAL** : No information found. PHYSICAL : No information found.

OTHER : No relevant information available.
PERSISTENCE AND : No relevant information available.

**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 no 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** 

**Sodium Metasilicate** 

**ECOTOXICITY (Aquatic Toxicity)** 

This material has exhibited moderate toxicity to aquatic organisms.

**BIODEGRADATION PERSISTENCE** 

This material is inorganic and not subject to biodegradation. This material is believed to persist in the environment.

**BIOCONCENTRATION** 

This material is not expected to bio-concentrate in organisms.

**ECOLOGICAL INFORMATION** 

**Sodium Tripolyphosphate** 

**ECOTOXICITY** 

Invertebrate: 48-hr LC50 Daphnia magna: > 1000 mg/L; Practically Nontoxic 96 hr. LC 50 > 100 mg/L, non-toxic (Rainbow trout, Inland silversides and mysid schrimp). [FMC 189-1081, 1082 & 1083] 48 hr. LC 50> 100 mg/L, non-toxic (Daphnia magna)

[FMC 189-1084]

PERSISTENCE and **DEGRADABILITY** 

No data available.

**ENVIRONMENTAL FATE** 

Phosphates: Inorganic phosphates, including this product, at high concentrations in the environment have the potential to cause eutrophication in aquatic systems. This condition is characterized by excessive algal growth, and subsequent decreases in oxygen levels. In general, proper use and disposal of this product should pose no adverse ecological risk.

**ECOLOGICAL INFORMATION** 

**Trisodium Phosphate Crystals** 

**ECOTOXICITY** 

Invertebrate: 48-hr EC50 Daphnia magna: >1000 mg/L; Practically Nontoxic. Warm-water Fish: 96-hr LC50 Bluegill sunfish: 440 mg/L; Practically Nontoxic. Coldwater Fish: 96-hr LC50 Rainbow trout: 260 mg/L; Practically Nontoxic.

No definitive algal toxicity data was available for this material.

**ENVIRONMENTAL FATE** 

Phosphates: Inorganic phosphates, including this product, at high concentrations in the environment have the potential to cause eutrophication in aquatic systems. This condition is characterized by excessive algal growth, and subsequent decreases in oxygen levels. In general, proper use and disposal of this product should pose no adverse ecological risk.

**ECOLOGICAL INFORMATION** 

**Sodium Gluconate** 

**ECOTOXICITY BOD5 AND COD**  Not available Not available

**PRODUCTS OF** 

Possibly hazardous short term degradation products are not likely. However, long

**BIODEGRADATION** 

term degradation products may arise.

**TOXICITY OF PRODUCTS OF** 

The product and products of biodegradation are not toxic.

**BIODEGRADATION** 

**ECOLOGICAL INFORMATION Sodium Carbonate** 

**ECOTOXICITY** 

LC50 Fishes 1: 300mg/L, EC Daphnia: 265mg/L, LC50 Fishes 2: 740mg/L.

PERSISTENCE and

No data available.

**DEGRADABILITY** 

**BIOACCUMULATIVE POTENTIAL** No data available.

**ECOLOGICAL INFORMATION** 

: Sodium dodecyl diphenyl oxide disulfonate Harmful to aquatic organisms. Marine pollutant

**ECOTOXICITY** CHEMICAL FATE

Not readily biodegradable

#### **SECTION 13 – DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL RECOMMENDATIONS

: 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.

**ECOLOGY-WASTE MATERIALS** 

This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

#### **SECTION 14 – TRANSPORTATION INFORMATION**

DOT/IMDG/ IATA PROPER

UN-1823 SODIUM HYDROXIDE, SOLID, MIXTURE 8

**SHIPPING NAME** 

PG-II

**HAZARD CLASS AND LABEL** 

8 (Corrosive) UN 1823

PACKAGING GROUP

OIN 1023

**EPA REPORTABLE QUANTITY** 

**UN NUMBER** 

: PG-II

\_\_\_\_\_

1000 LBS. (454 KG) as Sodium Hydroxide 100%.

MARINE POLLUTANT EMERGENCY R

RESPONSE

Marine Pollutant ERG-154

**GUIDE** 

#### **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

: None

SARA SECTION 311/312

Immediate (acute) health hazard.

**HAZARD CLASS** 

SARA SECTION 313 : Not Listed

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)** : S1/2: Keep locked up and out of reach of children.

PHRASES

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: Sodium Hydroxide

Class D2B: Materials causing other toxic effects

(TOXIC): Sodium Carbonate



DOMESTIC SUBSTANCES LIST

(DSL)

**INGREDIENT DISCLOSURE** 

LIST

: Listed

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

**DATE PREPARED** : MAR 1, 2006 **DATE REVISED** : MAR 1, 2015