

## Safety Data Sheet DR-52-LF

### 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  
 : H314 Skin Corrosion Category 1A  
 : H318 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 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.

**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

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

### SECTION 3 – COMPOSITION/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 disulfonate	0.1-1	119345-04-9	Not Available	Not Found

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

### SECTION 4 – FIRST AID MEASURES

**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. 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 FIREFIGHTING**     : Do not enter fire area without proper protective equipment, including respiratory protection.

**HAZARDOUS COMBUSTION PRODUCTS**   : Potassium oxides. May liberate toxic gases. Sodium oxides. Phosphorous oxides. Nitrogen oxides. Carbon oxides (CO, CO<sub>2</sub>). Explosive Hydrogen gas.

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**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** : 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 section 15 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 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
Sodium Hydroxide	2 mg/m <sup>3</sup> (Ceiling)	2mg/m <sup>3</sup>	2mg/m <sup>3</sup> (Ceiling)
Sodium Metasilicate	8hr Recommended: 3mg/m <sup>3</sup>	Not Established	Not Established
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** : 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.

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- 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** : White free flowing powder with mild odor.
- ODOR** : Mild odor
- ODOR THRESHOLD** : Not available
- PH** : > 13.5
- MELTING POINT/FREEZING POINT** : Not available
- BOILING POINT** : Not available
- FLASHPOINT** : Not applicable
- EVAPORATION RATE** : Not available
- FLAMMABILITY** : Non flammable, Non combustible
- LOWER FLAMMABILITY LIMIT** : Not applicable
- UPPER FLAMMABILITY LIMIT** : Not applicable
- VAPOR PRESSURE** : Not available
- VAPOR DENSITY (AIR=1)** : Not available
- RELATIVE DENSITY** : > 1.0
- 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

- 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 AVOID** : Direct sunlight. Extremely high or low temperatures. Heat. Combustible materials. Incompatible materials.
- INCOMPATIBLE MATERIALS** : Strong acids. Strong oxidizers. Soft metals. May be corrosive to metal.
- HAZARDOUS DECOMPOSITION PRODUCTS** : 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** : **Sodium Tripolyphosphate**  
**ACUTE TOXICITY** : 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** : **Trisodium Phosphate Crystals**  
**ACUTE TOXICITY** : 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** : 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** : Not Classified. LD50 values: Oral LD50: 4090mg/kg (rat).  
**SKIN CORROSION/IRRITATION** : Causes skin irritation.  
**SERIOUS EYE DAMAGE/IRRITATION** : Causes serious eye irritation.

**TOXICOLOGICAL INFORMATION** : **Sodium dodecyl diphenyl oxide disulfonate**  
**ACUTE TOXICITY** : Eye and skin irritant, Ingestion and Inhalation: Unknown  
**CHRONIC TOXICITY** : 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 PHYSICAL** : No information found.  
**OTHER** : No relevant information available.  
**PERSISTENCE AND DEGRADABILITY** : No relevant information available.  
**BIOACCUMULATIVE POTENTIAL** : No relevant information available.  
**NOTES** : Water hazard class 1 (Self assessment): slightly hazardous for water. Do not allow

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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** : **Sodium Metasilicate**  
**ECOTOXICITY (Aquatic Toxicity)** : This material has exhibited moderate toxicity to aquatic organisms.  
**BIODEGRADATION** : This material is inorganic and not subject to biodegradation.  
**PERSISTENCE** : 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 I89-1081, 1082 & 1083] 48 hr. LC 50 > 100 mg/L, non-toxic (Daphnia magna) [FMC I89-1084]

**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** : 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 PRODUCTS OF BIODEGRADATION** : The product and products of biodegradation are not toxic.

**ECOLOGICAL INFORMATION** : **Sodium Carbonate**  
**ECOTOXICITY** : LC50 Fishes 1: 300mg/L, EC Daphnia: 265mg/L, LC50 Fishes 2: 740mg/L.  
**PERSISTENCE and DEGRADABILITY** : No data available.  
**BIOACCUMULATIVE POTENTIAL** : No data available.

**ECOLOGICAL INFORMATION** : **Sodium dodecyl diphenyl oxide disulfonate**  
**ECOTOXICITY** : Harmful to aquatic organisms. Marine pollutant  
**CHEMICAL FATE** : Not readily biodegradable

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### 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 SHIPPING NAME** : UN-1823 SODIUM HYDROXIDE, SOLID, MIXTURE 8 PG-II
- HAZARD CLASS AND LABEL** : 8 (Corrosive)
- UN NUMBER** : UN 1823
- PACKAGING GROUP** : PG-II
- EPA REPORTABLE QUANTITY (RQ)** : 1000 LBS. (454 KG) as Sodium Hydroxide 100%.
- MARINE POLLUTANT** : Marine Pollutant
- 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** : None
- SARA SECTION 311/312 HAZARD CLASS** : Immediate (acute) health hazard.
- 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 if 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

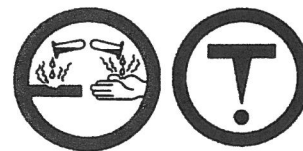


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### CANADIAN REGULATORY INFORMATION

**WHMIS CATEGORY** : Class E: Corrosive: Sodium Hydroxide  
Class D2B: Materials causing other toxic effects  
(TOXIC): Sodium Carbonate



**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 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