1. Product and Company Identification

Product Name	:	**AD-LP3 DAZ L**
Usage	:	**Enzymatic Laundry Compound**
Address	:	KSA -Khobar – NSH Tower 9th floor
Phone Number	:	+966 50 519 6007
E-mail	:	info@maracialsharq.com
Revision date	:	Jan, 2021.D
Distributed by	:	Maraci Alsharq

2. Hazards identification

2.1. Classification

Hazard Product classification : This product is not considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Health hazards : Eye Damage/Irritation - Category 2A
Skin Corrosion/Irritation - Category 2

2.2 label elements

Hazard pictograms :

Signal Word : Warning

Hazard Statements : Causes serious eye irritation.
Causes skin irritation.

Precaution statement : Wash hands thoroughly after handling.
Wear protective gloves and eye protection
Keep out of reach of children

Inhalation : Heavy exposure to dust may cause transient respiratory tract irritation. Prolonged heavy exposure to dust may cause respiratory sensitization.

Ingestion : Cause gastrointestinal irritation with nausea, vomiting, and/or diarrhea.

Eye contact : May cause temporary eye irritation. Prolonged contact may cause redness and/or tearing.

Skin contact : prolonged or excessively repeated skin contact could lead to irritation (red, dry, cracked skin) especially in hot weather. May cause more severe response if skin is abraded (scratched, scraped or cut). May be harmful if absorbed through the skin.

3. Composition/information on ingredients

Information on hazardous components

Active ingredients	Conc. %	CAS #
monohydrate sodium perborate	1 – 10	10332-33-9
Sodium carbonate	20 – 30	497-19-8
Sodium metasilicate	20 – 30	13517-24-3
Sodium tripolyphosphate	12.0-20.0	7758-29-4
Enzymatic complex	0.5 – 5.0	-

4. First-aid measures

Inhalation : Leave dusty area to fresh air immediately. In some cases, a respiratory reaction can occur which may include tightness of chest and difficulty breathing. If this occurs, seek medical attention immediately.

Skin contact : Remove contaminated clothing and wash the skin thoroughly with water. If symptoms occur seek medical advice.
Wash contaminated clothing before reuse.

Eye contact : Immediately flush eye with plenty of cool, running water. Remove contact lenses if applicable, and continue flushing for at least 15 minutes, holding eyelids apart to ensure thorough rinsing of the entire eye. Do not apply neutralizing agents. GET IMMEDIATE MEDICAL ATTENTION.

Ingestion : Do NOT induce vomiting. Do NOT attempt to give anything by mouth to an unconscious person. Rinse mouth thoroughly with water immediately. Give water to drink. If vomiting occurs, give further water to achieve effective dilution. If large amount swallowed or symptoms develop obtain medical attention.

First Aid Facilities : Eye wash facilities and safety shower should be available.

5. Fire and explosion measures

Flammability : Non-flammable.

Hazardous combustion products : Not flammable but may give off toxic fumes if involved in a fire (Such as Oxides of carbon and sulphur).

Suitable Extinguishing Media : CO2, water, or dry chemical may be used.

Instructions to the Fire Fighters : Isolate materials that are not involved in the fire and protect personnel. Use water spray to cool fire-exposed containers or structures. Use water spray to disperse vapors.

Personal protective equipment : Fire fighters to wear self-contained breathing apparatus and suitable protective clothing.

Standard procedure for chemical fires : As in any fire:
Fight fire with normal precautions from a reasonable distance.
Do not enter fire area without full protective equipment including respiratory protection.
Exercise caution when fighting any chemical fire.

6. Accidental release measures

Personal precautions : Ensure adequate ventilation. Wear appropriate protective equipment Minimize dust levels while collecting product. Prevent exposure to dust. Use gloves to minimize skin contact. When workers are facing concentrations above the exposure limit, they must use appropriate certified respirators.

Methods for Containment & cleaning up : Minor spills soak up with inert absorbent material and scoop into containers
In the event of a major spill, prevent spillage from entering drains or water courses. Prevent dust cloud and minimize air borne spreading of dust. Prevent further leakage or spillage if safe to do so.
Sweep up and shovel into suitable containers for disposal. Dispose of in accordance with local regulations. Isolate spill or leak area immediately. Keep unauthorized personnel away.
Do not use compressed air to clean surfaces. Vacuuming or wet sweeping is preferred.
Do not touch or walk through spilled material.
Any recovered product can be used for the usual purpose, depending on the extent and kind of contamination. Where a package (drum or bag) is damaged and / or leaking, repair it, or place it into an over-pack drum immediately so as to avoid or minimize material loss and contamination of surrounding environment.
Replace damaged containers immediately to avoid loss of material and contamination of surrounding atmosphere.

Environmental precautions : Do not allow contact with soil, surface or ground water.

7. Handling and storage

Precautions for safe handling : Before use carefully read the product label.
Use only with adequate ventilation.
Use of safe work practices are recommended to avoid breathing dusts, contact with skin and eyes or ingestion.
Use good personal hygiene practices.
Do not eat, drink or smoke when using this product.
Wash hands before eating, drinking, smoking, or using toilet facilities.
Wash thoroughly after work using soap and water.
Wash contaminated clothing thoroughly before re-use.

Conditions for safe storage, including any incompatibilities : Store in a cool, dry and well-ventilated area. Keep containers closed and away from foodstuffs, and incompatible materials.
Avoid moisture contamination. Prolonged storage may result in lumping or caking. Keep containers sealed when not in use.
Check regularly for leaks or spills.
KEEP OUT OF REACH OF CHILDREN.

8. Exposure controls and personal protection

Exposure limits	:	***Sodium carbonate*** Long-term exposure limit (8-hour TWA): WEL 5 mg/m³ ***Sodium metasilicate*** OSHA PEL (TWA) (mg/m³) 2 mg/m³ NaOH
Eye/Face protection	:	Use dust-tight chemical safety goggles to prevent eye contact. Contact lenses should not be worn when working with this material. Avoid contact with eyes.
Hand Protection	:	For sensitive skin or prolonged use, wear gloves. PVC or rubber gloves are recommended. Simple Design for minimal risk
Skin Protection	:	Avoid unnecessary skin contact. No special protective equipment required. Wear suitable protective clothing. Wash contaminated clothing before reuse.
Respiratory	:	In case of insufficient ventilation wear suitable respiratory equipment.
Engineering Controls	:	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Exposure Guidelines	:	No exposure limits noted for this product.
Hygiene measures	:	When handling bulk product, ensure adequate ventilation. Avoid breathing powder or dust. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing.

9. Physical and chemical properties

Appearance	: Powder
Color	: White
PH (referred to a 5% - solution)	: 11 - 12
Solubility	: Miscible with water

10. Stability and reactivity

Chemical Stability	: Stable under normal conditions.
Condition to Avoid	: Avoid exposure to high temperatures or direct sunlight. Water, moisture.
Incompatible Materials	: The product is alkaline and will react with acids. The powder will absorb moisture if left in open containers and consequently form hard lumps. Also reacts with Aluminum, Tin, Zinc and their alloys.
Hazardous Decomposition Products	: None under normal processing.
Hazardous Reactions	: None under normal use conditions.

11. Toxicological information

Information on likely routes of exposure : Inhalation, Ingestion, Eye contact, Skin contact.

Toxicity Data :

Sodium Carbonate

LD50 (Oral): 2800 - 4090 mg/kg (Rat)
LD50 (Dermal): > 2000 mg/kg (Rabbit)
LC50 (Inhalation): 1150 mg/m³ (Rat, 4h)
LC50 (Acute toxicity of the dust):1200 mg/m³ (Mouse, 2h)

Sodium Perborate mono hydrate

LD50 (Oral Acute): 1200 mg/kg (Rat), 1060 mg/kg (Mouse)

Sodium mitasilicate

LD50 (Oral) = 1153 mg/kg (Rat)
LD50 (Oral) = 770 mg/kg (mouse)
LD50 (Dermal) = 250 mg/kg (Rabbit)

Sodium tripolyphosphate

LD50 (Oral) = 3120 mg/kg (Rat)
LD50 (Dermal) > 7940 mg/kg (Rabbit)

Acute Potential Health Effects : May cause Irritating to respiratory system. Irritating to eyes. Irritating to skin.

Chronic Potential Health Effects : Skin: Causes skin irritation depending on the concentration, site (abraded or intact skin), and duration of exposure.
Eyes: Causes eye irritation.
Ingestion: It will irritate mucous membranes if swallowed because of its alkalinity.
Inhalation: Dust may cause respiratory tract and mucous membrane irritation with coughing and shortness of breath (dyspnea) depending on the concentration, site, and duration of exposure.

12. Ecological information

Ecotoxicity effects : Water:
Not regarded as dangerous for the environment. could be harmful to aquatic life in high concentrations according to its alkalinity

Ecotoxicity of sodium carbonate

Toxicity to fish: LC50 (96h) 300 mg/l Lepomis macrochirus (Bluegill)
Toxicity to aquatic invertebrates:EC50(48H)265mg/l Daphnia magna

Ecotoxicity of Sodium Perborate mono hydrate

Toxicity to Fish: LC50(96 h) 51 mg/l Bracydanio rerio
: NOEC, 25 mg/l Bracydanio rerio
Toxicity to Daphnia magna:EC50(48h) 11 mg/l Crustaceans
: NOEC, 8 mg/l Crustaceans
Toxicity to Algae: EC50(96h) 12 mg/L Scenedesmus subspicatus

Ecotoxity of sodium mitasilicate

toxicity to fish:LC50 (96h): 210 mg/L Brachydanio rerio 96h
Toxicity to Daphnia magna EC50 (96h) 216 mg/L

Ecotoxity of sodium tripolyphosphate

Ecotoxicity to fish:LC50(48h)1650 mg/l Leuciscus idus

SOIL: The product is water-soluble and may spread in water systems.
ATMOSPHERE:
Not included in the list of substances which may contribute to the greenhouse effect (Regulation (EC) No 842/2006).
Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).

Persistence & degradability : This product, at use dilutions, is readily broken down in biological effluent treatment plants

Bioaccumulative potential : No bioaccumulative potential noted for any component.

13. Disposal considerations

Waste Disposal Methods : Do not contaminate ponds, waterways or ditches with chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Legislations : Disposal should be in accordance with applicable regional, national and Local laws and regulations

Disposal considerations : Consign empty container to normal waste.

14. Regulatory information

TSCA : All Components of this product comply with TSCA inventory listing requirements

SARA 302 Hazardous Substances : This material does not contain any components with a section 302 EHS TPQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity : This material does not contain any components with a section 304 EHS RQ

SARA 311/312 Hazard Categories : None / no reportable quantities

SARA 313 Emissions Reporting : 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

Proposition 65 Listed Chemicals : This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

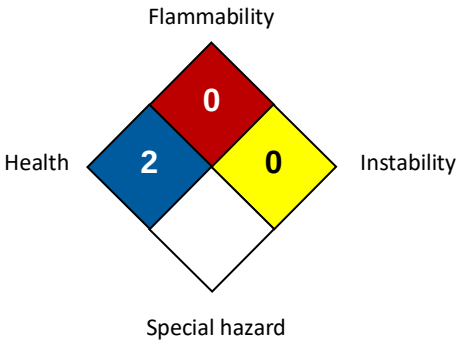
Canadian DSL/NDSL : this product contains one or several components listed in the Canadian NDSL

15. Transport information

UN-Number (DOT, ADR, ADN, IMDG, IATA)	:	Not regulated
UN proper shipping name	:	Cleaning Compounds, NOI, and powder.
Transport hazard class(es)	:	Not applicable.
Packing group	:	Not applicable.
Environmental hazards	:	Marine pollutant: No
Special precautions for user	:	Not applicable.

16. Other information

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARDS	0
PERSONAL PROTECTION	X

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High,
4 = Extreme, * = Chronic

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

The information of this MSDS is based on the present state of our knowledge and on current EEC and national laws. It is always the responsibility of the user to take all necessary steps in order to fulfill the demand laid down in the local rules and legislation. The information in this MSDS is meant as a

description of the safety requirements of our product. It is not to be considered as guarantee of the product's properties.

References: Not available.
Other Special Considerations: Not available.