



Chemical & Agricultural Industry, research s.a.

# Material Safety Data Sheet

## **LYPHASE<sup>®</sup> 36SL**

### **1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY**

#### **1.1 *Identification of the Product***

Designation	Herbicide
Trade name	<b>LYPHASE<sup>®</sup> 36SL</b>
Commonly used synonyms	Glyphosate liquid solution <b>48% IPA salt</b>
Product Use	Non selective postemergence translocated herbicide for the most stubborn annual and perennial weeds
CAS Number	Preparation - therefore not relevant
EINECS Number	Preparation - therefore not relevant
EINECS Name	Preparation - therefore not relevant
Molecular formula	Preparation - therefore not relevant

#### **1.2 *Company***

VIORYL S.A. 28 <sup>th</sup> km Athens-Lamia Nat. Road 190 14 AFIDNES GREECE	Telephone No.	+30 22 950 45 100
	Telefax No.	+30 22 950 45 250
	Email	<a href="mailto:agrochemical@vioryl.gr">agrochemical@vioryl.gr</a>

### **2. COMPOSITION / INFORMATION ON INGREDIENTS**

#### **2.1 *Nature of ingredients and concentration***

<b><u>COMPOSITION</u> :</b>	<b>CAS N°</b>	<b>EINECS N°</b>	<b>in %</b>
Glyphosate, isopropylamine salt	38641-94-0	213-997-4	48 (w/v)
Inert ingredients (Emulsifier water)	75-31-0 61791-26-2		56.7 (w/w)
Isopropylamin	75-31-0		
Tallow amine	61791-26-2		

#### **2.2 *Classification***

Classed as hazardous material according to EEC Directives 88/379/EEC and 2001/59/EEC as follow:

**Xi**



**N**



**Labelling**

Xi     Irritant  
N     Dangerous for the environment

**Risk phrases**

R36     Irritant to eyes  
R43     May cause sensitization by skin contact.  
R51/53 Toxic for the aquatic organisms.  
May cause long-term adverse effects in the aquatic environment.

**Safety phrases**

S2     Keep out of the reach of children.  
S13     Keep away from food, drink and animal feedingstuffs  
S20/21 When using do not eat, drink or smoke  
S25     Avoid contact with eyes.  
S26     In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S36/37 Wear suitable protective clothing and gloves  
S39     Wear eye/face protection.  
S61     Avoid release to the environment. Refer to special instructions/safety data sheets.  
SP1     Do not contaminate water with the product or the package

**3.     HAZARDS IDE**

**3.1     *Human health     (See also Toxicology Information, section 11)***

*Skin Contact:*                      This substance is not expected to cause prolonged or significant skin irritation. If absorbed through the skin, this substance is considered practically non-toxic to internal organs. This product is not expected to cause allergic skin reaction. Get medical attention.

*Eye Contact:*                      Eye contact may cause irritation, discomfort, tearing, swelling, redness, and blurred vision.

*Ingestion:*                          Ingestion may produce irritation of the digestive tract as demonstrated by signs and symptoms of mouth membrane irritation, nausea, vomiting and diarrhea. Get medical attention.

*Inhalation:*                          While this material has a low volatility, exposure to vapors is unlikely, however, overexposure to spray mist may result in minor irritation of the upper respiratory tract.

*Long term effects:*                No adverse effects are known.

**3.2     *Environment***

The active ingredient glyphosate is rapidly deactivated by adsorption to clay particles. Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters. (See Section 12 for other information.)

### 3.3 *Other*

#### *Fire, heating and detonation:*

This material will not burn. When strongly heated it can melt and decompose giving off carbon monoxide and dioxide, phosphorus pentoxide and nitrogen oxides.

## 4. **FIRST-AID MEASURES**

*Skin Contact:* Wash the affected area with soap and water.

*Eye Contact:* Immediately flush/irrigate eye with copious amounts of water for at least 10 minutes. Obtain medical attention.

*Ingestion:* Do not induce vomiting. Give water or milk to drink. Obtain medical attention if more than a small quantity has been swallowed.

*Inhalation:* Remove to fresh air. Obtain medical attention if ill effects occur.

## 5. **FIRE-FIGHTING MEASURES**

### ***5.1 If product is not directly involved in the Fire***

Use the best means available to extinguish the Fire.

### ***5.2 If product is involved in the Fire***

When strongly heated it can melt and decompose giving off carbon monoxide and dioxide, phosphorus pentoxide and nitrogen oxides.

**Unusual Fire and Explosion Hazards:** none

**Extinguishing Media:** Water, Carbon dioxide, foam, dry chemical or any class B extinguishing agent.

**Special Firefighting Procedures:** For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of normal products of combustion or oxygen deficiency. Read the entire document.

## 6. **ACCIDENTAL RELEASE MEASURES**

**Small spill:** Soak up spilled material with paper towels and discard in trash.

**Large spill:** Liquid spills on floor or other impervious surfaces should be contained or diked, and should be absorbed with attapulgite, bentonite or other absorbent clays. Collect contaminated absorbent, place in plastic-lined metal drum and dispose of in accordance with instructions provided under Section 13. "DISPOSAL". Thoroughly scrub floor or other impervious surface with a strong industrial type detergent solution and rinse with water.

For liquid spills that soak into the ground, contact the applicable Federal, State and or County Health Dept. for disposal recommendations. If disposal is required then refer to Section 13 "DISPOSAL" for instructions.

Leaking containers should be separated from non-leakers and either the container or its contents transferred to a drum or other non-leaking container and disposed of in

accordance with instructions provided under Section 13 "Disposal". Any recovered spilled liquid should be similarly collected and disposed of.

## **7. HANDLING AND STORAGE**

### **7.1 *Handling***

- Use with adequate ventilation. Wash hands thoroughly after handling. Keep away from heat, sparks and flames.
- Avoid fertilizer contamination by incompatible materials.
- Avoid unnecessary exposure to the atmosphere.
- Do not mix, store or apply this product or spray solutions in galvanized or unlined steel (except stainless steel) containers or spray tanks.

### **7.2 *Storage***

Store this product only in its original container in a secured storage area. Protect container from freezing. Do not contaminate water, foodstuffs, feed or seeds by storage or disposal.

**KEEP OUT OF REACH OF CHILDREN**

## **8. EXPOSURE CONTROL / PERSONAL PROTECTION**

### **8.1 *Occupational exposure limits***

No specific official limits.

### **8.2 *Precautionary and engineering measures***

No special ventilation is necessary.

### **8.3 *Personal Protection***

- Wear suitable gloves when handling the product over long periods.
- Wear goggles or safety glasses.
- After handling product, wash hands and observe good hygiene practice.
- If vapors present, use approved respirator.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

<i>Appearance</i>	Clear viscous amber liquid
<i>Odor</i>	Practically odorless to slight amine-like odor
<i>pH</i>	4-5
<i>Melting point</i>	<0°C
<i>Boiling point</i>	>100°C
<i>Explosive properties</i>	Not explosive as per EEC test A14 (67/548/EEC).
<i>Oxidizing properties</i>	Not classed as an oxidizing material according to Directive 88/379/EEC.
<i>Specific gravity</i>	1.17 Kgr/dm <sup>3</sup> .
<i>Solubility in water</i>	Completely miscible

## **10. STABILITY AND REACTIVITY**

### **10.1 Stability**

The product is stable under normal conditions of storage, handling and use. Product is stable for at least 5 years under normal conditions of warehouse storage.

### **10.2 Conditions to avoid**

Contamination by incompatible materials.

### **10.3 Materials to avoid**

Do not apply with a galvanized or unlined steel sprayer, or through any irrigation system. Reacts with these materials to produce hydrogen, a highly flammable gas that could explode.

### **10.4 Hazardous polymerization: Will not occur**

### **10.5 Hazardous Decomposition Products:**

Combustion may yield carbon monoxide and dioxide, phosphorus pentoxide and nitrogen oxides. Do not breathe smoke or fumes, Wear appropriate protective equipment

## **11. TOXICOLOGICAL INFORMATION**

### **11.1 General** See Section 3.1.

### **11.2 Toxicity Data**

INGESTION (oral): LD50 rat 5000 mg/kg (practically non-toxic)

SKIN (dermal): LD50 rabbit 2000 mg/kg (practically non-toxic)

INHALATION: LD50 rat >4.86mg/15min

Allergy sensitization: No sensitivity properties towards guinea pig in the Magnusson-Kligmann Maximization test

Carcinogenicity: EPA has classified glyphosate in category E (evidence of non-carcinogenicity for humans)

CHRONIC: Data from glyphosate laboratory toxicology studies were conducted with a formulation comprised of 62% isopropylamine salt of glyphosate (MON 0139).

Rabbits - 3 week dermal: Repeated daily primarily resulted in slight skin irritation.

Dogs - 6 month feeding: Only slight body weight changes noted.

Rats - 90 day feeding: No treatment related effects.

Mice - 90 day feeding: Decreased weight gains at the high dose level group animals.

NEUROTOXICITY: There was no evidence of nervous system toxicity

## **12. ECOLOGICAL INFORMATION**

### **12.1 Mobility**

Available data for a similar formulation indicate that the active ingredient in this product is rapidly adsorbed to soil.

### **12.2 Persistence/Degradability**

Available data for a similar formulation indicate that the active ingredient in this product is readily biodegrades in soil and water

### **12.3 Bio-accumulation**

The product does not show any bio-accumulation phenomena.

#### **12.4 Ecotoxicity**

Available data for a similar formulation are summarized below:

*Aquatic Invertebrates:* 48hr EC50 *Daphnia magna*: 11 mg/L; Slightly Toxic  
*Warmwater Fish:* 96-hr LC50 Bluegill sunfish: 7.5 mg/L; Moderately Toxic  
*Coldwater Fish:* 96-hr LC50 Rainbow trout: 5.5 mg/L; Moderately Toxic  
*Avian Species:* 8-day LC50 Bobwhite quail: >5,620 ppm; Practically Nontoxic  
*Mallard duck:* 8-day LC50 >5,620 ppm; Practically Nontoxic  
*Arthropods:* 48-hr Oral LD50 Honeybee: >100 ug/bee; Practically Nontoxic  
48-hr Contact LD50 Honeybee: >100ug/bee; Practically Nontoxic

### **13. DISPOSAL CONSIDERATIONS**

#### **13.1 General**

*For large spills:* Material collected that cannot be reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, State or local procedures.

*Product disposal:* Securely wrap partially filled or empty container in several layers of newspaper and discard in trash. Never pour product down any drain.

*Empty container:* Do not reuse container. Rinse thoroughly before discarding in trash.

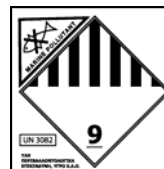
### **14. TRANSPORT INFORMATION**

#### **14.1 UN classification**

Classified according to the criteria of the following international transport codes IATA (Air Transport), RID (rail), ADR (road) and IMDG (sea):

#### **ADR**

**UN: 3082    Class: 9,    Marine pollutant**  
Environmentally hazardous substance liquid n.o.s



### **15. REGULATORY INFORMATION**

#### **15.1 EEC Directives**

### **16. OTHER INFORMATION**

The information in this Safety Data Sheet is given in good faith and belief in its accuracy based on our knowledge of the substance/preparation concerned at the date of publication. It does not imply the acceptance of any legal liability or responsibility whatsoever by the Company for the consequences of its use or misuse in any particular circumstances.

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