



**DYNONE ENERGY SL840 12X1L BOT IL**

Version 9 / EU  
102000004473

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Revision Date: 17.12.2018  
Print Date: 23.03.2020

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1 Product identifier**

**Trade name** DYNONE ENERGY SL840 12X1L BOT IL  
**Product code (UVP)** 06396712, 81705194

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

**Use** Fungicide

**1.3 Details of the supplier of the safety data sheet**

**Supplier** Bayer AG  
Kaiser-Wilhelm-Allee 1  
51373 Leverkusen  
Germany

**Telefax** +49(0)2173-38-7394

**Responsible Department** Substance Classification & Registration  
+49(0)2173-38-3409 (during business hours only)  
Email: BCS-SDS@bayer.com

**1.4 Emergency telephone no.**

**Emergency telephone no.** Global Incident Response Hotline (24h)  
+1 (760) 476-3964 (Company 3E for Bayer AG, Crop Science Division)

**SECTION 2: HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

**Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.**

Skin sensitisation: Category 1  
H317 May cause an allergic skin reaction.

**2.2 Label elements**

**Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.**

Hazard label for supply/use required.

**Hazardous components which must be listed on the label:**

- Propamocarb
- Fosetyl



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Print Date: 23.03.2020**Signal word:** Warning**Hazard statements**

H317 May cause an allergic skin reaction.  
EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

**Precautionary statements**

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P501 Dispose of contents/container in accordance with local regulation.

**2.3 Other hazards**

No other hazards known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures****Chemical nature**

Soluble concentrate (SL)  
Propamocarb/Fosetyl 530:310 g/l

**Hazardous components**

Hazard statements according to Regulation (EC) No. 1272/2008

Name	CAS-No. / EC-No. / REACH Reg. No.	Classification	Conc. [%]
		REGULATION (EC) No 1272/2008	
Propamocarb	24579-73-5	Skin Sens. 1, H317	47,30
Fosetyl	15845-66-6	Eye Dam. 1, H318	27,70
Sodium chloride	7647-14-5 231-598-3	Not classified	>= 1,0

**Further information**

For the full text of the H-Statements mentioned in this Section, see Section 16.

**SECTION 4: FIRST AID MEASURES****4.1 Description of first aid measures**

**General advice** Move out of dangerous area. Remove contaminated clothing immediately and dispose of safely.

**Inhalation** Move the victim to fresh air and keep at rest. If symptoms persist, call a physician.

**Skin contact** Wash off with soap and water. If symptoms persist, call a physician.



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**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. If eye irritation or redness persists, see an ophthalmologist.

**Ingestion** Do NOT induce vomiting. Rinse mouth. Call a physician or poison control center immediately.

**4.2 Most important symptoms and effects, both acute and delayed**

**Symptoms** The following symptoms may occur: Lethargy, Ataxia, Spasm, Local: sensitising effects

**4.3 Indication of any immediate medical attention and special treatment needed**

**Risks** This product, although being a carbamate, is NOT a cholinesterase inhibitor.

**Treatment** Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote. Contraindication: atropine. Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate.

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**SECTION 5: FIREFIGHTING MEASURES**

**5.1 Extinguishing media**

**Suitable** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable** High volume water jet

**5.2 Special hazards arising from the substance or mixture** In the event of fire the following may be released: Hydrogen chloride (HCl), Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Oxides of phosphorus, Nitrogen oxides (NOx)

**5.3 Advice for firefighters**

**Special protective equipment for firefighters** In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

**Further information** Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

**Precautions** Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.

**6.2 Environmental precautions** Do not allow to get into surface water, drains and ground water.

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**Methods for cleaning up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

**Additional advice** Check also for any local site procedures.

**6.4 Reference to other sections** Information regarding safe handling, see section 7.  
Information regarding personal protective equipment, see section 8.  
Information regarding waste disposal, see section 13.

**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling**

**Advice on safe handling** Use only in area provided with appropriate exhaust ventilation.

**Advice on protection against fire and explosion** No special precautions required.

**Hygiene measures** Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Remove soiled clothing immediately and clean thoroughly before using again. Wash hands immediately after work, if necessary take a shower.

**7.2 Conditions for safe storage, including any incompatibilities**

**Requirements for storage areas and containers** Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Keep away from direct sunlight. Protect from freezing.

**Advice on common storage** Keep away from food, drink and animal feedingstuffs.

**Suitable materials** HDPE (high density polyethylene)

**7.3 Specific end use(s)** Refer to the label and/or leaflet.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters**

Components	CAS-No.	Control parameters	Update	Basis
Propamocarb	24579-73-5	1,1 mg/m <sup>3</sup> (TWA)		OES BCS*
Sodium chloride	7647-14-5	10 mg/m <sup>3</sup> (TWA)		OES BCS*

\*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

**8.2 Exposure controls****Personal protective equipment**

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

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<b>Respiratory protection</b>	Respiratory protection is not required under anticipated circumstances of exposure. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.
<b>Hand protection</b>	Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet. Material Nitrile rubber Rate of permeability > 480 min Glove thickness > 0,4 mm Protective index Class 6 Directive Protective gloves complying with EN 374.
<b>Eye protection</b>	Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).
<b>Skin and body protection</b>	Wear standard coveralls and Category 3 Type 4 suit. If there is a risk of significant exposure, consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.
<b>General protective measures</b>	If product is handled while not enclosed, and if contact may occur: Complete suit protecting against chemicals

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

<b>Form</b>	Liquid
<b>Colour</b>	colourless to light yellow
<b>Odour</b>	odourless
<b>pH</b>	6,0 - 7,5 (100 %) (23 °C)
<b>Flash point</b>	> 120 °C ( 1.013 hPa)
<b>Ignition temperature</b>	300 °C
<b>Density</b>	ca. 1,12 g/cm <sup>3</sup> ( 20 °C)
<b>Water solubility</b>	completely miscible
<b>Partition coefficient: n-octanol/water</b>	Propamocarb: log Pow: 0,84 Fosetyl: log Pow: -0,70



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<b>Viscosity, kinematic</b>	36,9 mm <sup>2</sup> /s ( 40 °C)
<b>Surface tension</b>	59 mN/m ( 20 °C) Determined as a 1% solution in distilled water.
<b>Explosivity</b>	Not explosive 92/69/EEC, A.14 / OECD 113
<b>9.2 Other information</b>	Further safety related physical-chemical data are not known.

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**SECTION 10: STABILITY AND REACTIVITY**

**10.1 Reactivity**

**Thermal decomposition** Stable under normal conditions.

**10.2 Chemical stability** Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions** No hazardous reactions when stored and handled according to prescribed instructions.

**10.4 Conditions to avoid** Extremes of temperature and direct sunlight.

**10.5 Incompatible materials** Store only in the original container.

**10.6 Hazardous decomposition products** No decomposition products expected under normal conditions of use.

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**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

**Acute oral toxicity** LD50 (Rat) > 2.000 mg/kg

**Acute inhalation toxicity** LC50 (Rat) > 2,27 mg/l  
Exposure time: 4 h  
Highest attainable concentration.

**Acute dermal toxicity** LD50 (Rat) > 2.000 mg/kg

**Skin corrosion/irritation** No skin irritation (Rabbit)

**Serious eye damage/eye irritation** No eye irritation (Rabbit)

**Respiratory or skin sensitisation** Skin: Sensitising (Mouse)  
OECD Test Guideline 429, local lymph node assay (LLNA)

**Assessment STOT Specific target organ toxicity – single exposure**

Propamocarb: Based on available data, the classification criteria are not met.  
Fosetyl: Based on available data, the classification criteria are not met.

**Assessment STOT Specific target organ toxicity – repeated exposure**

Propamocarb did not cause specific target organ toxicity in experimental animal studies.  
Fosetyl did not cause specific target organ toxicity in experimental animal studies.

**DYNONE ENERGY SL840 12X1L BOT IL**Version 9 / EU  
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Propamocarb was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.  
Fosetyl was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

**Assessment carcinogenicity**

Propamocarb was not carcinogenic in lifetime feeding studies in rats and mice.  
Fosetyl was not carcinogenic in lifetime feeding studies in rats and mice.

**Assessment toxicity to reproduction**

Propamocarb did not cause reproductive toxicity in a two-generation study in rats.  
Fosetyl did not cause reproductive toxicity in a two-generation study in rats.

**Assessment developmental toxicity**

Propamocarb caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Propamocarb are related to maternal toxicity.  
Fosetyl did not cause developmental toxicity in rats and rabbits.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity**

<b>Toxicity to fish</b>	LC50 (Oncorhynchus mykiss (rainbow trout)) > 98 mg/l Exposure time: 96 h
<b>Toxicity to aquatic invertebrates</b>	EC50 (Daphnia magna (Water flea)) > 97 mg/l Exposure time: 48 h
<b>Toxicity to aquatic plants</b>	EC50 (Raphidocelis subcapitata (freshwater green alga)) > 97 mg/l Exposure time: 72 h

**12.2 Persistence and degradability**

<b>Biodegradability</b>	Propamocarb: rapidly biodegradable Fosetyl: rapidly biodegradable
<b>Koc</b>	Propamocarb: Koc: 719 Fosetyl: Koc: 0,1

**12.3 Bioaccumulative potential**

<b>Bioaccumulation</b>	Propamocarb: Does not bioaccumulate. Fosetyl: Does not bioaccumulate.
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**12.4 Mobility in soil**

<b>Mobility in soil</b>	Propamocarb: Slightly mobile in soils Fosetyl: Highly mobile in soils
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**12.5 Results of PBT and vPvB assessment**



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**PBT and vPvB assessment** Propamocarb: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).  
Fosetyl: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

**12.6 Other adverse effects**

**Additional ecological information** No other effects to be mentioned.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

**Product** In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.

**Contaminated packaging** Not completely emptied packagings should be disposed of as hazardous waste.

**Waste key for the unused product** **02 01 08\*** agrochemical waste containing hazardous substances

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**SECTION 14: TRANSPORT INFORMATION**

**According to ADN/ADR/RID/IMDG/IATA not classified as dangerous goods.**

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

**14.1 – 14.5** Not applicable.

**14.6 Special precautions for user**

See sections 6 to 8 of this Safety Data Sheet.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**

No transport in bulk according to the IBC Code.

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**SECTION 15: REGULATORY INFORMATION**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Further information**

WHO-classification: III (Slightly hazardous)

**15.2 Chemical safety assessment**

A chemical safety assessment is not required.

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Print Date: 23.03.2020**SECTION 16: OTHER INFORMATION****Text of the hazard statements mentioned in Section 3**

H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.

**Abbreviations and acronyms**

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
ADR European Agreement concerning the International Carriage of Dangerous Goods by Road  
ATE Acute toxicity estimate  
CAS-Nr. Chemical Abstracts Service number  
Conc. Concentration  
EC-No. European community number  
ECx Effective concentration to x %  
EINECS European inventory of existing commercial substances  
ELINCS European list of notified chemical substances  
EN European Standard  
EU European Union  
IATA International Air Transport Association  
IBC International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)  
ICx Inhibition concentration to x %  
IMDG International Maritime Dangerous Goods  
LCx Lethal concentration to x %  
LDx Lethal dose to x %  
LOEC/LOEL Lowest observed effect concentration/level  
MARPOL MARPOL: International Convention for the prevention of marine pollution from ships  
N.O.S. Not otherwise specified  
NOEC/NOEL No observed effect concentration/level  
OECD Organization for Economic Co-operation and Development  
RID Regulations concerning the International Carriage of Dangerous Goods by Rail  
TWA Time weighted average  
UN United Nations  
WHO World health organisation

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 2015/830 amending Regulation (EU) No 1907/2006 and any subsequent amendments. This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

**Reason for Revision:** Section 3: Composition / Information on Ingredients. Section 8: Exposure Controls / Personal Protection. Section 11: Toxicological Information.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.