

Safety data sheet as per Commission Regulation (EU) 2015/830

Product: Additiv 730



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name	Additiv 730
Chemical Name	Zinc dialkyl dithiophosphate (ZDDP)
CAS Number	68649-42-3
EC Number	272-028-3
Pre-Registration number (REACH)	17-2119391155-38-0000

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

Relevant identified uses	Lubricant additive; Anti-wear additives to lubricants such as greases, gear oils, and motor oils; corrosion inhibitors and antioxidants
Uses identified against	Food additive, medicinal products, cosmetic products

1.3 Details of the supplier of the safety data sheet:

Manufacturer	Prasol Chemicals Pvt. Ltd., Prasol House, Plot No.A-17/2/3, T.T.C. Indl. Area, Khairne M.I.D.C., Navi Mumbai - 400 710. Maharashtra, India.
Telephone	+91-22-27782555
Telefax	+91-22-27782430
e-mail address	sales@prasolchem.com; inquiry@prasolchem.com

1.4 Emergency telephone number

Telephone	+91-22- 27782555
Language	English

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Skin Irritation	Category 2	H315	Causes skin irritation
Eye Damage	Category 1	H318	Causes serious eye damage
Aquatic Chronic	Category 2	H411	Toxic to aquatic life with long lasting effects

Information concerning particular hazards for human and environment: No further information

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008 (CLP)

Hazard pictograms



GHS05



GHS07



GHS09

Signal word Danger

Hazard statements

H315	Causes skin irritation
H318	Causes serious eye damage
H411	Toxic to aquatic life with long lasting effects

Precautionary statements

General	P103	Read label before use.
Prevention	P264	Wash hands thoroughly after handling.
	P273	Avoid release to the environment.
	P280	Use protective gloves and eye protection.
Response	P302+P352	IF ON SKIN: Wash with plenty of water.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
	P310	Immediately call a doctor.
	P321	Specific treatment: wash with plenty of water and mild soap.
	P332 + P313	If skin irritation occurs: Get medical attention.
	P362+P364	Take off contaminated clothing and wash it before reuse.
	P391	Collect spillage

Storage -

Disposal P501 Dispose of contents and container in accordance with national regulations

2.3 Other hazards

Not a PBT, vPVB substance according to the criteria of REACH regulation



◆ **SECTION 3: Composition/information on ingredients**

3.1 Substances

Ingredient	CAS No.	EC No.	Concentration (%)
Zinc dialkyl dithiophosphate (ZDDP)	68649-42-3	272-028-3	80-100
Additional information:			
Molecular Formula	not applicable (UVCB)		
Molecular Weight	not applicable (UVCB)		

◆ **SECTION 4: First aid measures**

4.1 Description of first aid measures

General information	Symptoms of poisoning may only appear several hours later. When symptoms persist or in all cases of doubt seek medical advice. Remove from exposure, lie down. Never give anything by mouth to an unconscious person.
After inhalation	After inhalation of vapours during processing, remove the patient to fresh air at once.
After skin contact	Take off all contaminated clothing immediately. If symptoms persist, call a physician. Wash off immediately with soap and plenty of water.
After eye contact	Rinse immediately with plenty of water and seek medical advice.
After swallowing	Do not induce vomiting and seek medical advice immediately.
4.2 Most important symptoms and effects, both acute and delayed	Headache, dizziness, nausea, eye irritation
4.3 Indication of any immediate medical attention and special treatment needed	Treat symptomatically and supportively

◆ **SECTION 5: Firefighting measures**

5.1 Extinguishing media	
Suitable extinguishing media	CO ₂ , dry powder, foam
Unsuitable extinguishing media	water jet
5.2 Special hazards arising from the substance or mixture	May form toxic sulfur dioxide and carbon oxides if burning. Closed container may rupture if strongly heated. Combustible liquid. Explosive mixtures may occur at temperatures at or above the flashpoint.
5.3 Advice for firefighters	Cool closed containers exposed to fire with water spray. Wear self-contained breathing apparatus.

◆ **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Avoid breathing vapours, mist or gas during processing. Ensure adequate ventilation
6.2 Environmental precautions	Do not allow to enter sewers, surface or ground water.
6.3 Methods and material for containment and cleaning up	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Suitable binder: sand
6.4 Reference to other sections	Section 8 for information on personal protection equipment. Section 13 for disposal information

◆ **SECTION 7: Handling and storage**

7.1 Precautions for safe handling	If possible, use material transfer, metering and blending plants that are closed. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
7.2 Conditions for safe storage, including any incompatibilities	
Advice on protection against fire and explosion	Follow normal measures for preventive fire protection.
Storage	German storage class: 10 - Combustible liquids Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Mechanical exhaust required.



Advice on common storage	Observe prohibition against storing together!
Storage stability	Maximum Storage Temperature: 45°C
7.3 Specific end use(s)	No further relevant information available

◆ **SECTION 8: Exposure controls/personal protection**

8.1 Control parameters	Occupational Exposure Limit	Contains no substances with occupational exposure limit values.		
8.2 Exposure controls	Appropriate engineering controls	If possible, use material transfer, metering and blending plants that are closed		
	Personal protective equipment			
	Eye/ face protection	closed goggles, face shield		
	Skin protection			
	Hand protection	Type of material	Thickness	Breakthrough time
		Butyl-rubber	0.5 mm	> 480 min
		Polychloroprene (PCP)	0.5 mm	110 min
	Body protection	Boots, body suit		
	Respiratory protection	Not required; except in case of aerosol formation. Avoid inhaling vapours.		
	Thermal hazards	Combustible liquid, possibility of decomposition on excess heating		
	Industrial hygiene	Avoid contact with skin and eyes. Remove immediately all contaminated clothing. Keep working clothes separately. Smoking, eating and drinking should be prohibited in the application area.		

◆ **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties				
	Appearance	Colorless to pale brown liquid		
	Odour	Mild petroleum odor		
	Odour threshold	no data available		
	pH	5.5-7.5		
	Melting point	not determined (liquid; pour point -21oC)		
	Boiling point	not determined (decomposes before boiling)		
	Flash point	>160°C (open cup)		
	Evaporation rate	not determined		
	Flammability (solid, gas)	not applicable (product is a liquid)		
	Flammability limits	no data available		
	Vapour pressure	0.0025Pa at 25°C		
	Vapour density	not determined		
	Relative density	1.10 -1.20 at 15.6°C		
	Solubility in water	1658mg/L at 22°C, pH 5		
	Partition coefficient	3.5 log Kow (n-octanol/water) at 20°C		
	Ignition temperature	262°C		
	Decomposition temperature	no data available		
	Viscosity at 100 °C	10-16 cSt		
	Explosive properties	no explosive properties however containers may explode in fire		
	Oxidizing properties	no oxidizing properties		
9.2 Other information	no further information			

◆ **SECTION 10: Stability and reactivity**

10.1 Reactivity	No hazardous reaction when handled and stored according to provisions.		
10.2 Chemical stability	Under storage at normal ambient temperatures (-40°C to +45°C), the product is stable.		
10.3 Possibility of hazardous reactions	Spontaneous decomposition may start at 150°C.; After prolonged heating, slow decomposition may start at above 80°C.		
10.4 Conditions to avoid	Extremes of temperature and direct sunlight.		
10.5 Incompatible materials	Keep away from reducing agents, oxidising agents, acids and bases.		
10.6 Hazardous decomposition products	formation of alkylmercaptans, dialkylsulphides, traces of hydrogen sulphide possible		



SECTION 11: Toxicological information

11.1 Information on toxicological effects				
Acute toxicity				
LD50	oral	rat	3.08 g/kg bw	Category 5
LC50	inhalation	rat	>2.3 mg/l	not classified
LD50	Dermal	rabbit	20 g/kg bw	not classified
Skin irritation		Irritating Category 2; 24 h (rabbit)		
Serious eye irritation		Irritating Category 2A; 24 h (rabbit)		
Respiratory or skin sensitization		skin sensitizer		
Germ cell mutagenicity		non mutagenic (Ames test)		
Carcinogenicity		no data available		
Reproductive toxicity		NOAEL 30 mg/kg/day (rat)		
STOT-single exposure		irritating to eye and skin;		
STOT-repeated exposure		not classified as specific target organ toxicant		
		NOAEL	125 mg/kg bw/day; rat (oral)	

SECTION 12: Ecological information

12.1 Toxicity				
Aquatic toxicity				
Toxicity to fish		LC50	96h	4.5mg/L <i>Oncorhynchus mykiss</i>
Toxicity to aquatic invertebrates		LC50	48h	5.4 mg/L <i>Daphnia magna</i>
Toxicity to aquatic algae and cyanobacteria		EC50	72h	2.0 mg/L <i>Selenastrum capricornutum</i>
Toxicity to microorganisms		EC50	3h	>10,000mg sewage, domestic
12.2 Persistence and degradability				
Biodegradation		not readily biodegradable (1.5% in 28days)		
12.3 Bioaccumulative potential				
		Bioconcentration factor <1000L/Kg		
		very low potential for bioaccumulation		
12.4 Mobility in soil		log Koc = 3.5		
12.5 Results of PBT and vPvB assessment		Not a PBT, vPvB substance according to the REACH regulation		
12.6 Other adverse effects		Harmful to aquatic organisms		
		The material is harmful to the environment		

SECTION 13: Disposal considerations

13.1 Waste treatment methods	Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Do not dispose in sewage.
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SECTION 14: Transport information

	ADR/RID	ADN	IMDG	ICAO/IATA
14.1 UN Number	3082	3082	3082	3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MIXTURE, CONTAINS ZINC DIALKYL DITHIOPHOSPHATE)			
14.3 Transport hazard class	9	9	9	9
14.4 Packaging group	III	III	III	III
14.5 Environmental hazards	environmentally hazardous, marine pollutant			
14.6 Special precautions for the user	Combustible liquid; Flash point 96°C (closed cup) Environmentally hazardous substance. Marine pollutants. Irritating to the eyes. Keep dry. Keep separated from foodstuffs			
	EmS Number	F-A (S-F)		
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	See regulatory information for transport approval			

SECTION 15: Regulatory information

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

Major accident hazard Seveso III no

International Chemical Inventory Status

USA (TSCA) listed
Canada (DSL) listed
Australia (AICS) listed
Japan (MITI) listed
Korea (KECL) listed
Philippines (PICCS) listed
China listed
New Zealand listed
Taiwan listed

15.2 Chemical safety assessment A Chemical Safety Assessment will be carried out at the time of REACH registration

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Further information:

Sections in which changes have been made since the last version are marked with a diamond ♦ in the left hand margin.

Abbreviations and acronyms in English language:

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
AICS Australian Inventory of Chemical Substances
CAS Chemical Abstracts Service (division of the American Chemical Society)
CLP Classification for Labeling and Packaging
DSL Domestic Substances List
EC European Commission
EC50 Half maximal effective concentration
EINECS European Inventory of Existing Commercial Chemical Substances
GHS Globally Harmonized System of Classification and Labeling of Chemicals
IATA International Air Transport Association
IBC International Bulk Chemical
ICAO International Civil Aviation Organization
IMDG International Maritime Code for Dangerous Goods
KECL Korea Existing Chemicals List
KOC Soil adsorption coefficient
KOW Partition Coefficient octanol-water
LC50 Lethal concentration, 50 percent
LD50 Lethal dose, 50 percent
MARPOL International Convention for the Prevention of Pollution from Ships
MITI Ministry of International Trade and Industry
NOAEC No Observed Adverse Effect Concentration
NOAEL No Observed Adverse Effect Level
NOEC No Observed Effect Concentration
PBT Persistent, bioaccumulative and toxic substances
PICCS Philippine Inventory of Chemicals and Chemical Substances
RID Regulations Concerning the International Transport of Dangerous Goods by Rail
STOT Specific target organ toxicity
TSCA Toxic Substances Control Act
UN United Nations
vPVB (very) Persistent, (very) Bioaccumulative

Sources

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

ECHA <https://echa.europa.eu/substance-information/-/substanceinfo/100.065.461>