SAFETY DATA SHEET



VELPAR® L VU

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

Product identifier		
Trade name	VELPAR® L VU	
Product code (UVP)	84114669	
SDS Number	102000030319	
EPA Registration No.	432-1573	
Relevant identified uses of th	e substance or mixture and uses advised against	
Use	Herbicide	
Restrictions on use	See product label for restrictions.	
Information on supplier		
Supplier	Bayer Environmental Science 2 T.W. Alexander Drive Research Triangle PK, NC 27709 United States	
Responsible Department	Email: SDSINFO.BCS-NA@bayer.com	
Emergency telephone no.		
Emergency Telephone Number (24hr/ 7 days)	1-800-334-7577	
Product Information Telephone Number	1-800-331-2867	

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Serious eye damage: Category 1 Flammable liquids: Category 3



Signal word: Danger

Hazard statements

Causes serious eye damage. Flammable liquid and vapour.

Precautionary statements

Wear protective gloves and eye protection/face protection. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

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Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ ventilating/ lighting/ equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER/doctor/physician.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container in accordance with local regulation.

Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Hexazinone	51235-04-2	25.0
Ethanol	64-17-5	41.6

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Inhalation	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
Skin contact	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

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Most important sym	ptoms and effects, both acute and delayed
Symptoms	To date no symptoms are known.
Indication of any im	mediate medical attention and special treatment needed
Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media			
Suitable	Water spray, Foam, Dry chemical, Carbon dioxide (CO2)		
Unsuitable	High volume water jet		
Advice for firefighters			
Special protective equipment for fire-fighters	Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.		
Further information	Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth. Do not allow run-off from fire fighting to enter drains or water courses. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.		
Flash point Autoignition temperature	23 - 25 °C no data available		
Lower explosion limit	no data available		
Upper explosion limit	no data available		
Explosivity	not applicable		

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protect	tive equipment and emergency procedures			
Precautions	Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Remove all sources of ignition. Keep unauthorized people away.			
Methods and materials for containment and cleaning up				
Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.			
Additional advice	Do not allow to enter soil, waterways or waste water canal. Do not			

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	allow product to contact non-target plants. Use personal protective equipment.
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

Precautions for safe handling

Advice on safe handling	Use only in area provided with appropriate exhaust ventilation. Handle and open container in a manner as to prevent spillage.		
Advice on protection against fire and explosion	Keep away from heat and sources of ignition. The product is extremely flammable.		
Hygiene measures	Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.		
Conditions for safe storage, including any incompatibilities			
Requirements for storage areas and containers	Store in original container and out of the reach of children, preferably in a locked storage area. Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Keep away from direct sunlight. Protect from		

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

freezing.

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Ethanol	64-17-5	1,000 ppm (STEL)	02 2012	ACGIH
Ethanol	64-17-5	1,900 mg/m3/1,000 ppm (REL)	2010	NIOSH
Ethanol	64-17-5	1,900 mg/m3/1,000 ppm (PEL)	02 2006	OSHA Z1
Ethanol	64-17-5	1,900 mg/m3/1,000 ppm (TWA)	1989	OSHA Z1A
Ethanol	64-17-5	1,900 mg/m3/1,000 ppm (TWA)	06 2008	TN OEL
Ethanol	64-17-5	1010ppb (ST ESL)	02 2013	TX ESL
Ethanol	64-17-5	1000ppb	07 2011	TX ESL

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		(AN ESL)		
Ethanol	64-17-5	1910ug/m3 (ST ESL)	02 2013	TX ESL
Ethanol	64-17-5	1880ug/m3 (AN ESL)	07 2011	TX ESL
Ethanol	64-17-5	1,900 mg/m3/1,000 ppm (TWA PEL)	08 2010	US CA OEL
Ethanol	64-17-5	500 ppm (TWA)		OES BCS*
Hexazinone	51235-04-2	50ug/m3 (ST ESL)	07 2011	TX ESL
Hexazinone	51235-04-2	5ug/m3 (AN ESL)	07 2011	TX ESL

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

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.

Respiratory protection When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations. Hand protection Chemical resistant nitrile rubber gloves Eye protection Safety glasses with side-shields or Goggles Skin and body protection Wear long-sleeved shirt and long pants and shoes plus socks. **General protective measures** Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid

water.

Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	light yellow
Physical State	Liquid
Odor	alcoholic
Odour Threshold	no data available
рН	no data available
Vapor Pressure	33 hPa / 24.8 mm Hg at 25 °C
Vapor Density (Air = 1)	no data available

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0.97 g/cm³ at 20 °C
no data available
no data available no data available
dispersible
not applicable
no data available
not applicable
no data available
23 - 25 °C no data available
no data available
no data available
not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity		
Thermal decomposition	no data available	
Chemical stability	Stable under recommended storage conditions.	
Conditions to avoid	Heat, flames and sparks.	
Incompatible materials	Strong acids, Strong bases	
Hazardous decomposition products	No decomposition products expected under normal conditions of use.	

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Eye contact, Ingestion, Skin contact	
Immediate Effects Eye	Corrosive to eyes.	
Skin	May cause skin irritation. Prolonged skin contact may cause skin irritation and/or dermatitis.	
Ingestion	Harmful if swallowed.	

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Information on toxicological effects

Acute oral toxicity	LD50 (rat) 4,120 mg/kg		
Acute inhalation toxicity	LC50 (rat) > 5 mg/l Exposure time: 4 h		
Acute dermal toxicity	LD50 (rat) > 5,000 mg/kg		
Skin irritation	Slight irritation (rabbit)		
Eye irritation	corrosive (rabbit)		
Sensitisation	Non-sensitizing. (guinea pig)		
ACGIH			
Ethanol	64-17-5	Group A3	
NTP			
None.			
OSHA			
None.			
Further information			

Only acute toxicity studies have been performed on the formulated product.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) > 320 mg/l Exposure time: 96 h
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 152 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient hexazinone.
Toxicity to aquatic plants	ErC50 (Skeletonema costatum) 0.022 mg/l Exposure time: 120 h The value mentioned relates to the active ingredient hexazinone.
Environmental precautions	Do not allow to get into surface water, drains and ground water. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Drift or runoff from treated areas may adversely affect non-target plants.

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SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Do not empty into drains. Do not contaminate water, food, or feed by disposal. Dispose in accordance with all local, state/provincial and federal regulations.
Contaminated packaging	Do not re-use empty containers. Triple rinse containers. Puncture container to avoid re-use. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning. If burned, stay out of smoke.
RCRA Information	Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

49CFR UN number Class Packaging group Proper shipping name	1170 3 III ETHANOL SOLUTION
IMDG UN number Class Packaging group Marine pollutant Proper shipping name	1170 3 III NO ETHANOL SOLUTION
IATA UN number Class Packaging group Environm. Hazardous Mark Proper shipping name	1170 3 III NO ETHANOL SOLUTION

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

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SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-1573 **US Federal Regulations TSCA** list Hexazinone 51235-04-2 Ethanol 64-17-5 US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D) None. SARA Title III - Section 302 - Notification and Information None. SARA Title III - Section 313 - Toxic Chemical Release Reporting Hexazinone 51235-04-2 **US States Regulatory Reporting** CA Prop65 This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

Hexazinone	51235-04-2	NJ, RI
Ethanol	64-17-5	CA, CT, MN

Canadian Regulations Canadian Domestic Substance List None.

Environmental CERCLA None. Clean Water Section 307 Priority Pollutants None. Safe Drinking Water Act Maximum Contaminant Levels None.

EPA/FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Danger!

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Signal word:

Hazard statements:

Corrosive - causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing. Wash thoroughly with soap and water after handling.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

49CFR	Code of Federal Re	egulations, Title 49	
ACGIH	US. ACGIH Threshold Limit Values		
CAS-Nr.	Chemical Abstracts Service number		
EINECS	European inventory of existing commercial substances		
ELINCS	European list of notified chemical substances		
IARC	US. ARC Monographs on Occupational Exposures to Chemical Agents		
IATA	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
N.O.S.	Not otherwise specified		
NTP	US. National Toxicology Program (NTP) Report on Carcinogens		
OECD	Organization for Economic Co-operation and Development		
TDG	Transportation of Dangerous Goods		
TWA Time weighted average			
UN United Nations			
WHO World health organisation			
NFPA 704 (National Fire Protection Association):			
Health - 2 Fla	ammability - 3	Instability - 0	Others - none
		System, based on the T Physical Hazard - 0	Third Edition Ratings Guide) PPE -

0 =minimal hazard, 1 =slight hazard, 2 =moderate hazard, 3 =severe hazard, 4 =extreme hazard

Reason for Revision: New Safety Data Sheet.

Revision Date: 10/02/2015

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