

NAVIUS® FLEX

Version 1.0 / CDN 102000037122

1/10 Revision Date: 08/20/2019 Print Date: 05/06/2024

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

Product identifier	
Trade name	NAVIUS® FLEX
Product code (UVP)	86218755
SDS Number	102000037122
PCP Registration No.	30922
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	2022 Environmental Science CA Inc.
	137 Glasgow Street, Suite 210, Unit 111
	Kitchener, Canada ON N2G 4X8
Emergency Telephone Number (24hr/ 7 days)	1-800-424-9300
Product Information Telephone Number	1-800-331-2867

SECTION 2: HAZARDS IDENTIFICATION

Classified in accordance with Part 2 of the Hazardous Products Regulations Specific target organ toxicity - single exposure: Category 3

Labelling in accordance with Part 3 of the Hazardous Products Regulations



Signal word: Warning

Hazard statements May cause respiratory irritation.

Precautionary statements

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Use only outdoors or in a well-ventilated area. IF INHALED: Remove person to fresh air and keep comfortable for breathing.



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Call a POISON CENTER/doctor/physician if you feel unwell. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with local regulation.

Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified. No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Aminocyclopyrachlor	858956-08-8	39.5
Metsulfuron-methyl	74223-64-6	12.6
Sodium carbonate	497-19-8	10.7
Naphthalene and alkyl naphthalene sulphonic acids formaldehyde condensate, sodium salt	68425-94-5	1.0

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



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SECTION 5: FIREFIGHTING MEASURES

Extinguishing media Suitable Unsuitable	Water spray, Foam, Dry chemical, Carbon dioxide (CO2) High volume water jet
Special hazards arising from the substance or mixture	Dangerous gases are evolved in the event of a fire.
Advice for firefighters	
Special protective equipment for firefighters	Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
Further information	Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
Flash point	Not applicable
Auto-ignition temperature	No data available
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Explosivity	No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures		
Precautions	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.	
Methods and materials for con	ntainment and cleaning up	
Methods for cleaning up	Avoid dust formation. Use approved industrial vacuum cleaner for removal. Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.	
Additional advice	If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal.	
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.	



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SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	Handle and open container in a manner as to prevent spillage. Avoid dust formation. Use only in area provided with appropriate exhaust ventilation.	
Advice on protection against fire and explosion	Keep away from heat and sources of ignition.	
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. Remove Personal Protective Equipment (PPE) immediately after handling this product. 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. 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.	

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Sodium carbonate	497-19-8	10 mg/m3		OES BCS*
		(TWA)		

*OES BCS: Bayer AG, Crop Science Division "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
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.



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Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	light brown
Physical State	small rod
Odor	slightly ammonia-like
Odour Threshold	No data available
рН	5.7 (1 %) (as aqueous solution)
Vapor Pressure	No data available
Vapor Density (Air = 1)	No data available
Evaporation rate	Not applicable
Boiling Point	Not applicable
Melting / Freezing Point	Not applicable
Water solubility	dispersible
Minimum Ignition Energy	No data available
Decomposition temperature	No data available
Partition coefficient: n- octanol/water	No data available
Viscosity	Not applicable
Flash point	Not applicable
Auto-ignition temperature	No data available
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Explosivity	No data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity	
Thermal decomposition	No data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.



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Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Eye contact, Skin contact, Inhalation, Ingestion
Immediate Effects Eye	May cause eye irritation.

Information on toxicological effects

Acute oral toxicity	LD50 (female Rat) > 5,000 mg/kg	
Acute inhalation toxicity	LC50 (male/female combined Rat) > 5.18 mg/l Exposure time: 4 h	
Acute dermal toxicity	LD50 (male/female combined Rat) > 5,000 mg/kg	
Skin corrosion/irritation	No skin irritation (Rabbit)	
Serious eye damage/eye irritation	Moderate eye irritation. (Rabbit)	
Respiratory or skin sensitisation	Non-sensitizing. (Mouse)	

Assessment STOT Specific target organ toxicity - repeated exposure

Metsulfuron-methyl: Based on available data, the classification criteria are not met.

Assessment mutagenicity

Metsulfuron-methyl: Based on available data, the classification criteria are not met. Not mutagenic in Ames Test.

Assessment carcinogenicity

Metsulfuron-methyl is not considered carcinogenic.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.



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Assessment toxicity to reproduction

Metsulfuron-methyl did not cause reproductive toxicity in laboratory animals.

Assessment developmental toxicity

Metsulfuron-methyl is not considered a developmental toxicant.

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)) > 150 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient metsulfuron methyl.	
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) > 120 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient metsulfuron methyl.	
Toxicity to aquatic plants	EC50 (Anabaena flos-aquae (cyanobacterium)) 0.066 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient metsulfuron methyl.	
	EC50 (Lemna minor (common duckweed)) 0.00036 mg/l Exposure time: 14 d The value mentioned relates to the active ingredient metsulfuron methyl.	
Biodegradability	Metsulfuron-methyl: No data available	
Кос	Metsulfuron-methyl:No data available	
Bioaccumulation	Metsulfuron-methyl: No data available	
Mobility in soil	Metsulfuron-methyl: No data available	
Environmental precautions	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 allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label.	

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Do not contaminate water, food, or feed by disposal. Dispose in accordance with all local, state/provincial and federal



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	regulations. Follow container label instructions for disposal of wastes generated during use in compliance with the product label.
Contaminated packaging	Do not re-use empty containers. Triple rinse containers. Puncture container to avoid re-use. Follow advice on product label and/or leaflet.

SECTION 14: TRANSPORT INFORMATION

TDG UN number Labels Packaging group Marine pollutant Proper shipping name	3077 9 III Marine pollutant ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (METSULFURON-METHYL)
49CFR	Not dangerous goods / not hazardous material
IMDG UN number Class Packaging group Marine pollutant Proper shipping name	3077 9 III YES ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (METSULFURON-METHYL MIXTURE)
IATA UN number Class Packaging group Environm. Hazardous Mark Proper shipping name	3077 9 III YES ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (METSULFURON-METHYL MIXTURE)

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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Further Information

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Exempt from regulation when transported by road or rail, in accordance with TDG Regulations 1.45.1. This exemption provides that this product does not require dangerous goods shipping documentation or safety marks when transported on land by road or rail.

SECTION 15: REGULATORY INFORMATION

PCP Registration No. 30922

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

	acionyms					
49CFR	Code of Federa	I Regulations, Title 49				
ACGIH	US. ACGIH Thr	US. ACGIH Threshold Limit Values				
ATE	Acute toxicity e	Acute toxicity estimate				
CAS-Nr.	Chemical Abstr	Chemical Abstracts Service number				
CERCLA	Comprehensive	Comprehensive Environmental Response, Compensation, and Liability Act				
EINECS	European inver	European inventory of existing commercial substances				
ELINCS	European list of	European list of notified chemical substances				
IARC	International Ag	International Agency for Research on Cancer				
IATA	International Ai	International Air Transport Association				
IMDG	International Ma	International Maritime Dangerous Goods				
N.O.S.	Not otherwise s	Not otherwise specified				
NTP	US. National To	US. National Toxicology Program (NTP) Report on Carcinogens				
OECD	Organization fo	Organization for Economic Co-operation and Development				
TDG	Transportation	Transportation of Dangerous Goods				
TWA	Time weighted	average				
UN	United Nations	•				
WHO	World health or	ganisation				
NFPA 704 (National Fire Protection Association):						
Health - 1	Flammability - 1	Instability - 0	Others - none			

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide) Health - 1 Flammability - 1 Physical Hazard - 0 PPE -

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

Reason for Revision: New Safety Data Sheet.

Prepared by the HSE Department of Bayer CropScience Inc. (306)-721-0310.



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