

MATERIAL SAFETY DATA SHEETS

FOR TENSILE:

SOLO WDG HERBICIDE

PLUS

**LONTREL DRY
SOLUBLE GRANULAR HERBICIDE**

PLUS

MERGE ADJUVANT

Safety data sheet

SOLO® WDG

Revision date : 2009/03/18
Version: 1.0

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(30265587/SDS_CPA_CA/EN)

1. Substance/preparation and company identification

Company

BASF Canada Inc.
100 Milverton Drive
Mississauga, ON L5R 4H1, CANADA

24 Hour Emergency Response Information

CANUTEC (reverse charges): (613) 996-6666
BASF HOTLINE: (800) 454-COPE (2673)

Substance number:	000000063565
Molecular formula:	C15 H19 N3 O4
Molecular weight:	305.3 g/mol
Synonyms:	imazamox
PCP# 25496	

2. Hazardous ingredients

Not WHMIS controlled.

3. Hazard identification

Emergency overview

WARNING: Contains the allergen sulfite(s). Causes eye irritation.
KEEP OUT OF REACH OF CHILDREN.
CAUSES SKIN IRRITATION.

Potential health effects

See Product Label for additional precautionary statements.

Acute toxicity:

Virtually nontoxic after a single skin contact.

Sensitization:

There is no evidence of a skin-sensitizing potential.

Repeated dose toxicity:

Potential environmental effects

Aquatic toxicity:

There is a high probability that the product is not acutely harmful to fish.
There is a high probability that the product is not acutely harmful to aquatic invertebrates.
Very toxic (acute effect) to aquatic plants.

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4. First-aid measures

If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary.

If on skin:

Rinse skin immediately with plenty of water for 15 - 20 minutes.

If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

If swallowed:

Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

5. Fire-fighting measures

Flash point:		not applicable, Non-flammable.
Autoignition:		not applicable
Flammability:	does not ignite	
Self-ignition temperature:		not self-igniting

Suitable extinguishing media:

foam, dry extinguishing media, carbon dioxide, water spray

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, nitrogen oxide, nitrogen dioxide, Hydrocarbons,
If product is heated above decomposition temperature, toxic vapours will be released. The substances/groups of substances mentioned can be released if the product is involved in a fire.

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

6. Accidental release measures

Personal precautions:

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

Cleanup:

Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

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7. Handling and storage

Handling

General advice:

No special measures necessary if stored and handled correctly.

Protection against fire and explosion:

Dust can form an explosive mixture with air. No explosion proofing necessary.

Storage

General advice:

Protect against moisture. Keep away from heat. Protect from direct sunlight.

8. Exposure controls and personal protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Advice on system design:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapours.

Hand protection:

Chemical resistant protective gloves (EN 374)

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

9. Physical and chemical properties

Form:	granules	
Odour:	odourless	
Odour threshold:	No data available.	
Colour:	off-white	
pH value:	2.8	(2 %(m)) (as a dispersion)
Melting point:		not applicable, The substance / product decomposes therefore not determined.
Boiling point:		The product is a non-volatile solid., not applicable
Vapour pressure:		negligible
Bulk density:	430 kg/m3	(20 °C)
Partitioning coefficient n-octanol/water (log Pow):		not applicable

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Viscosity, dynamic:	not applicable
Viscosity, kinematic:	not applicable
Solubility in water:	dispersible

10. Stability and reactivity

Conditions to avoid:

Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme temperatures. Avoid prolonged exposure to extreme heat. Avoid contamination. Avoid electro-static discharge. Avoid prolonged storage. This product may form an explosive mixture if: 1. the dust is suspended in the atmosphere as a dust cloud AND 2. the concentration of the dust is above the lower explosion limit (LEL) AND 3. the limiting oxygen concentration (LOC) is exceeded.

Substances to avoid:

oxidizing agents

Oxidizing properties:

Not an oxidizer.

11. Toxicological information

Acute toxicity

Oral:

LD50/rat: > 5,000 mg/kg

Dermal:

LD50/rat: > 4,000 mg/kg

LD50/rabbit: > 2,000 mg/kg

Skin irritation:

rabbit: non-irritant

Eye irritation :

rabbit: non-irritant

Sensitization:

guinea pig: Skin sensitizing effects were not observed in animal studies.

12. Ecological information

Environmental fate and transport

Biodegradation:

Evaluation: Not readily biodegradable (by OECD criteria).

Information on: imazamox

Evaluation: Not readily biodegradable (by OECD criteria).

Information on: imazamox

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Information on: imazamox
Acute and prolonged toxicity to fish:
Rainbow trout/LC50 (96 h): = > 122 ppm

Information on: imazamox
Acute toxicity to aquatic invertebrates:
Daphnia magna/EC50: >122 ppm

Information on: imazamox
Toxicity to aquatic plants:
algae/EC50 (120 h): > 0.037 mg/l

13. Disposal considerations

Waste disposal of substance:

Must be dumped or incinerated in accordance with local regulations.

14. Transport information

Reference Bill of Lading

15. Regulatory information

Federal Regulations

Registration status:

DSL, CA released / exempt

WHMIS does not apply to this product.

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

16. Other information

Refer to product label for EPA registration number.

Local contact information

BASF Canada Product Safety
prod_reg@basf.com

SOLO® WDG is a registered trademark of BASF Canada or BASF SE
END OF DATA SHEET

Product Name: LONTREL* Dry Soluble Granular Herbicide**Issue Date:** 2009.10.16

Dow AgroSciences Canada Inc. encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. Product and Company Identification**Product Name**

LONTREL* Dry Soluble Granular Herbicide

COMPANY IDENTIFICATION

Dow AgroSciences Canada Inc.
A Subsidiary of The Dow Chemical Company
Suite 2100, 450 1st Street SW,
Calgary, AB T2P 5H1
Canada

For MSDS updates and Product Information: 800-667-3852**Prepared By:** Prepared for use in Canada by EH&S, Product Regulatory
Management Department.
450-652-1029**Revision** 2009.10.16

Customer Information Number: 800-667-3852

EMERGENCY TELEPHONE NUMBER**24-Hour Emergency Contact:** 613-996-6666**Local Emergency Contact:** 613-996-6666**2. Hazards Identification****Emergency Overview****Color:** Off-white**Physical State:** Granules.**Odor:** Odorless**Hazards of product:**

CAUTION! May cause eye irritation. May be harmful if inhaled. May cause respiratory tract irritation. Isolate area. Keep upwind of spill. Toxic fumes may be released in fire situations. Slipping hazard.

Potential Health Effects

Eye Contact: Solid or dust may cause irritation or corneal injury due to mechanical action.

Skin Contact: Brief contact is essentially nonirritating to skin.

Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Inhalation: No adverse effects are anticipated from single exposure to dust.

Ingestion: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

3. Composition/information on ingredients

Component	CAS #	Amount W/W
Clopyralid Potassium Salt	58509-83-4	75.0 %
Balance		25.0 %

Amounts are presented as percentages by weight.

4. First-aid measures

Eye Contact: Hold eyes 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 eyes. Call a poison control center or doctor for treatment advice.

Skin Contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation: Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice.

Ingestion: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Never give anything by mouth to an unconscious person.

Notes to Physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.

Emergency Personnel Protection: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

5. Fire Fighting Measures

Extinguishing Media: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam.

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Move container from fire area if this is possible without hazard. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers,

boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Unusual Fire and Explosion Hazards: Container may rupture from gas generation in a fire situation. Dense smoke is produced when product burns.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Hydrogen chloride. Carbon monoxide. Carbon dioxide.

See Section 9 for related Physical Properties

6. Accidental Release Measures

Steps to be Taken if Material is Released or Spilled: Contain spilled material if possible. Small spills: Sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Dow AgroSciences for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

Personal Precautions: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Keep upwind of spill. Spilled material may cause a slipping hazard. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

7. Handling and Storage

Handling

General Handling: Keep out of reach of children. Avoid contact with eyes. Wash thoroughly after handling. Avoid breathing dust. Use with adequate ventilation. Do not swallow. Keep container closed.

Storage

Store in a dry place. Store in original container. Do not store near food, foodstuffs, drugs or potable water supplies.

8. Exposure Controls / Personal Protection

Exposure Limits

Consult local authorities for recommended exposure limits.

None established

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

Personal Protection

Eye/Face Protection: Use safety glasses (with side shields). If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Skin Protection: Wear clean, body-covering clothing.

Hand protection: Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Respiratory Protection: Under intended handling conditions, no respiratory protection should be needed.

Ingestion: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Engineering Controls

Ventilation: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

9. Physical and Chemical Properties

Physical State	Granules.
Color	Off-white
Odor	Odorless
Odor Threshold	Odorless
Flash Point - Closed Cup	Not applicable
Flammable Limits In Air	Lower: Not applicable Upper: Not applicable
Autoignition Temperature	Not applicable
Vapor Pressure	Not applicable
Boiling Point (760 mmHg)	Not applicable.
Vapor Density (air = 1)	Not applicable
Specific Gravity (H₂O = 1)	
Freezing Point	Not applicable
Melting Point	No test data available
Solubility in water (by weight)	No test data available
pH	6.9 (@ 1 %) <i>CIPAC MT 75.2</i> (5% aqueous solution)
Decomposition Temperature	No test data available
Partition coefficient, n-octanol/water (log Pow)	No data available for this product.
Evaporation Rate (Butyl Acetate = 1)	No test data available
Kinematic Viscosity	Not applicable

10. Stability and Reactivity

Stability/Instability

Thermally stable at typical use temperatures.

Conditions to Avoid: Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems.

Incompatible Materials: Avoid contact with: Acid chlorides. Halogenated hydrocarbons. Halogens. Flammable hydrogen may be generated from contact with metals such as: Zinc. Tin.

Hazardous Polymerization

Will not occur.

Thermal Decomposition

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon monoxide. Carbon dioxide. Hydrogen. Toxic gases are released during decomposition.

11. Toxicological Information

Acute Toxicity

Ingestion

||As product. LD50, Rat 4,298 mg/kg

Skin Absorption

||As product. LD50, Rat > 2,000 mg/kg
||No deaths occurred at this concentration.

Inhalation

||As product. The LC50 has not been determined.
||For similar material(s): LC50, 4 h, Rat > 0.5 mg/l

Sensitization

Skin

||As product. Did not cause allergic skin reactions when tested in guinea pigs.

Repeated Dose Toxicity

||No relevant information found.

Chronic Toxicity and Carcinogenicity

||No relevant information found.

Developmental Toxicity

||No relevant information found.

Reproductive Toxicity

||No relevant information found.

Genetic Toxicology

||No relevant information found.

12. Ecological Information

ENVIRONMENTAL FATE

Data for Component: **Clopyralid Potassium Salt**

Movement & Partitioning

||No relevant information found.

Persistence and Degradability

||No relevant information found.

ECOTOXICITY

||Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

Aquatic Plant Toxicity

||ErC50, green alga *Pseudokirchneriella subcapitata* (formerly known as *Selenastrum capricornutum*),
72 h: > 100 mg/l

13. Disposal Considerations

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

14. Transport Information**TDG Small container**

NOT REGULATED

TDG Large container

NOT REGULATED

IMDG

NOT REGULATED

ICAO/IATA

NOT REGULATED

15. Regulatory Information**CEPA - Domestic Substances List (DSL)**

All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

Hazardous Products Act Information: CPR Compliance

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Hazardous Products Act Information: WHMIS Classification

This product is exempt under WHMIS.

Pest Control Products Act Registration number: 27306

National Fire Code of Canada

Not applicable

16. Other Information**Hazard Rating System**

NFPA	Health	Fire	Reactivity
	1	0	0

Recommended Uses and Restrictions

Product use: Herbicide for use in manufacturing, formulating or repackaging

Revision

Identification Number: 55562 / 1023 / Issue Date 2009.10.16 / Version: 2.0

DAS Code: EF-797

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

N/A	Not available
W/W	Weight/Weight
OEL	Occupational Exposure Limit
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
ACGIH	American Conference of Governmental Industrial Hygienists, Inc.
DOW IHG	Dow Industrial Hygiene Guideline

WEEL	Workplace Environmental Exposure Level
HAZ_DES	Hazard Designation
VOL/VOL	Volume/Volume

Dow AgroSciences Canada Inc. urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

Safety data sheet

MERGE®

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Version: 1.0

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(30059253/SDS_CPA_CA/EN)

1. Substance/preparation and company identification

Company

BASF Canada Inc.
100 Milverton Drive
Mississauga, ON L5R 4H1, CANADA

24 Hour Emergency Response Information

CANUTEC (reverse charges): (613) 996-6666
BASF HOTLINE: (800) 454-COPE (2673)

Substance number: 000000139697
PCP# 21058, 24702, 25818

2. Hazardous ingredients

Not WHMIS controlled.

3. Hazard identification

Emergency overview

COMBUSTIBLE LIQUID.
CAUSES SKIN IRRITATION.

Potential health effects

See Product Label for additional precautionary statements.

Irritation:

Irritating to eyes and skin.

4. First-aid measures

If inhaled:

Keep patient calm, remove to fresh air. Assist in breathing if necessary. Consult a physician.

If on skin:

Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:

Hold eyelids open to facilitate rinsing. Flush with copious amounts of water for at least 15 minutes. If symptoms persist, seek medical advice.

If swallowed:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

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5. Fire-fighting measures

Flash point: 65.5 °C (closed cup)

Suitable extinguishing media:

water spray, dry extinguishing media, foam, carbon dioxide

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, nitrogen oxides

The substances/groups of substances mentioned can be released in case of fire.

Protective equipment for fire-fighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions:

Use personal protective clothing. Avoid contact with the skin, eyes and clothing. Remove contaminated clothes, undergarments and shoes immediately.

Cleanup:

For small amounts: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

For large amounts: Dike spillage. Pump off product.

7. Handling and storage

Handling

General advice:

Provide good ventilation of working area (local exhaust ventilation if necessary).

Storage

General advice:

Protect against moisture. Avoid all sources of ignition: heat, sparks, open flame. Protect from direct sunlight. Store protected against freezing.

Storage incompatibility:

General: Segregate from foods and animal feeds.

Storage stability:

Storage duration: 24 Months

8. Exposure controls and personal protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

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Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:

Breathing protection if gases/vapours are formed. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

Hand protection:

Chemical resistant protective gloves, Suitable materials, rubber, plastic

Eye protection:

Tightly fitting safety goggles (chemical goggles).

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:

Avoid contact with the skin, eyes and clothing. Wearing of closed work clothing is recommended. Keep separated from food stuffs and feed stocks. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift.

9. Physical and chemical properties

Form:	liquid	
Odour:	faintly aromatic	
Odour threshold:	No data available.	
Colour:	pale straw yellow	
pH value:		not applicable, not soluble
Freezing point:		Unspecified
Boiling range:		Information applies to the solvent.
<i>Information on: Solvent naphtha</i>		
Boiling point:	183.89 °C	

Vapour pressure:		No data available.
<i>Information on: Solvent naphtha</i>		
Vapour pressure:	< 5 hPa	

Density:	0.934 g/cm ³	(20 °C)
Partitioning coefficient n-octanol/water (log Pow):		not applicable
Solubility in water:		emulsifiable

10. Stability and reactivity

Conditions to avoid:

Avoid extreme heat.

Substances to avoid:

strong oxidizing agents

Hazardous reactions:

The product is chemically stable.

No hazardous reactions when stored and handled according to instructions.

Oxidizing properties:

No data available.

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11. Toxicological information

Oral:

Information on: Alcohols, C16-18, ethoxylated propoxylated
LD50/rat: > 2,000 mg/kg

Information on: solvent naphtha
LD50/rat: > 7,000 mg/kg

Inhalation:

Information on: Alcohols, C16-18, ethoxylated propoxylated
LC50/rat: > 0.25 - < 1 mg/l / 4 h
An aerosol was tested.

Information on: solvent naphtha
LC50/rat: > 4 mg/l / 4 h

Dermal:

Information on: Alcohols, C16-18, ethoxylated propoxylated
> 4,000 mg/kg

Information on: solvent naphtha
LD50/rat: > 3,160 mg/kg

Skin irritation:

Information on: Alcohols, C16-18, ethoxylated propoxylated
rabbit: non-irritant (BASF-Test)

Information on: solvent naphtha
rabbit: moderately irritating

Eye irritation :

Information on: Alcohols, C16-18, ethoxylated propoxylated
rabbit: non-irritant (BASF-Test)

Information on: solvent naphtha
rabbit: Slightly irritating.

Sensitization:

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Information on: Alcohols, C16-18, ethoxylated propoxylated

*Information on: solvent naphtha
Buehler test/guinea pig: Non-sensitizing.*

Genetic toxicity:

Information on: Alcohols, C16-18, ethoxylated propoxylated

Information on: solvent naphtha

No mutagenic effect was found in various tests with bacteria and mammalian cell culture.

The substance was not mutagenic in studies with mammals.

12. Ecological information

Information on: Alcohols, C16-18, ethoxylated propoxylated

Test method: mod. OECD 303A

Method of analysis: Bismuth-active substance

Degree of elimination: >= 90 %

Test method: OECD 301B; ISO 9439; 92/69/EEC, C.4-C

Method of analysis: CO2 formation relative to the theoretical value

Degree of elimination: 70 - 80 %

Information on: solvent naphtha

Test method: OECD 301F; ISO 9408; 92/69/EEC, C.4-D (aerobic), activated sludge, domestic

Method of analysis: BOD of COD

Degree of elimination: 50 - 60 % (28 d)

Evaluation: Easily eliminated from water.

Readily biodegradable.

Evaluation:

Information on: Alcohols, C16-18, ethoxylated propoxylated

Acute and prolonged toxicity to fish:

Rainbow trout/LC50: 0.1 - 1 mg/l

Information on: solvent naphtha

Acute and prolonged toxicity to fish:

OECD 203; ISO 7346; 84/449/EEC, C.1 semistatic

Rainbow trout/LC50 (96 h): 18 mg/l

The statement of the toxic effect relates to the analytically determined concentration. The product has low solubility in the test medium. An aqueous dispersion has been tested.

Information on: Alcohols, C16-18, ethoxylated propoxylated

Acute toxicity to aquatic invertebrates:

EC50 (48 h): 0.1 - 1 mg/l

Information on: solvent naphtha

Acute toxicity to aquatic invertebrates:

OECD Guideline 202, part 1 static

Daphnia magna/EC50 (48 h): 1.4 - 21 mg/l

The product has low solubility in the test medium. An aqueous dispersion has been tested.

Information on: Alcohols, C16-18, ethoxylated propoxylated

Toxicity to aquatic plants:

EC50 (72 h): 0.1 - 1 mg/l

Information on: solvent naphtha

Toxicity to aquatic plants:

Safety data sheet

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(30059253/SDS_CPA_CA/EN)

OECD Guideline 201 green algae/EC50 (72 h): 3.7 - 8.3 mg/l

The product has low solubility in the test medium. An aqueous dispersion has been tested.

Analogous: Assessment derived from products with similar chemical character.

13. Disposal considerations

Waste disposal of substance:

See product label for disposal and recycling instructions.

14. Transport information

Reference Bill of Lading

15. Regulatory information

Federal Regulations

Registration status:

DSL, CA

released / exempt

WHMIS does not apply to this product.

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

16. Other information

Refer to product label for EPA registration number.

Local contact information

BASF Canada Product Safety

prod_reg@basf.com

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END OF DATA SHEET