

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 7/9/2012 Revision date: 11/5/2024 Version: 3.0

## **SECTION 1: Identification**

#### 1.1. Identification

Product name : Metsulfuron-methyl 60% WG

#### 1.2. Recommended use and restrictions on use

Recommended use : Agrochemical herbicide

## 1.3. Supplier

ALBAUGH LLC 1525 NE 36th St, 50021

## 1.4. Emergency telephone number

Emergency number : For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call

CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970

(collect calls accepted)

## **SECTION 2: Hazard(s) identification**

#### 2.1. Classification of the substance or mixture

## **GHS-US** classification

Acute toxicity (inhalation:dust,mist) Category 4 H332 Harmful if inhaled. Full text of H-statements: see section 16

#### 2.2. GHS Label elements, including precautionary statements

#### **GHS US labelling**

Hazard pictograms (GHS US)



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H332 - Harmful if inhaled.

Precautionary statements (GHS US) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 - Use only outdoors or in a well-ventilated area.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.

P312 - Call a poison center or doctor if you feel unwell.

## 2.3. Other hazards which do not result in classification

No additional information available

## 2.4. Unknown acute toxicity (GHS US)

No additional information available



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

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%
metsulfuron-methyl	CAS-No.: 74223-64-6	60

Full text of hazard classes and H-statements : see section 16

#### **SECTION 4: First-aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor

if you feel unwell.

First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : Dust of the product, if present, may cause respiratory irritation after an excessive inhalation

exposure. Although no appropriate human or animal health effects data are known to exist, this

material is expected to be an inhalation hazard.

Symptoms/effects after skin contact : None under normal conditions. Dust may cause irritation in skin folds or by contact in

combination with tight clothing.

Symptoms/effects after eye contact : None under normal conditions. Dust from this product may cause eye irritation.

Symptoms/effects after ingestion : None under normal conditions.

## 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## **SECTION 5: Fire-fighting measures**

## 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.
Unsuitable extinguishing media : Do not use a heavy water stream.

## 5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard. Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper

protective equipment, including respiratory protection.



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Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

## **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material

damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer

to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel.

## 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling : Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid

breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

## 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Keep cool. Protect from sunlight.

Packaging materials : Store always product in container of same material as original container.

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

## 8.1. Control parameters

No additional information available



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#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

## Personal protective equipment symbol(s):







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

#### 9.1. Information on basic physical and chemical properties

Physical state : Solid
Colour : Off-white

Odour : Mild characteristic odor Odour threshold : No data available

pH : 5.47

Melting point No data available Freezing point Not applicable Boiling point No data available Flash point Not applicable Relative evaporation rate (butylacetate=1) No data available Flammability (solid, gas) No data available Vapour pressure No data available Relative vapour density at 20°C No data available Relative density No data available Solubility No data available Partition coefficient n-octanol/water (Log Pow) : No data available Auto-ignition temperature : Not applicable Decomposition temperature : No data available Viscosity, kinematic Not applicable Viscosity, dynamic No data available Explosive limits Not applicable



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Explosive properties : Product is not explosive.

Oxidising properties : Product is not an oxidizer.

#### 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

## 10.5. Incompatible materials

No additional information available

## 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

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Rometsol	
LD50 oral rat	> 5000 mg/kg (Stillmeadow data)
LD50 dermal rat	> 5050 mg/kg (Stillmeadow data)
LC50 Inhalation - Rat	> 2.27 mg/l/4h (Stillmeadow data)

Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-repeated exposure : Not classified



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Aspiration hazard : Not classified Viscosity, kinematic : Not applicable

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

Ecology - general : Very toxic to aquatic life with lasting effects.

Rometsol				
LC50 - Fish [1]	> 200 mg/l (for Brachydanio rerio,TECAM data)			
EC50 - Crustacea [1]	51.76 mg/l (48h,TECAM data)			
ErC50 algae	0.5 mg/l (for Pseudokirchneriella subcapitata,TECAM data)			
metsulfuron-methyl (74223-64-6)				
LC50 - Fish [1]	> 150 mg/l (96h, for rainbow trout and bluegill sunfish ,ePM)			
EC50 - Crustacea [1]	> 120 mg/l (48h,ePM)			
ErC50 algae	0.157 mg/l (72h,ePM)			
ErC50 other aquatic plants	0.00036 mg/l Lemna gibba(EPM)			

#### 12.2. Persistence and degradability

Rometsol		
Persistence and degradability	Not rapidly degradable	
metsulfuron-methyl (74223-64-6)		
Persistence and degradability	Rapidly degradable	

## 12.3. Bioaccumulative potential

No additional information available

## 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

## 13.1. Disposal methods

Regional waste regulation : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Comply with applicable regulations for solid waste disposal. Disposal must be done according to

official regulations.

Additional information : Do not re-use empty containers.



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## **SECTION 14: Transport information**

In accordance with DOT / TDG / IMDG / IATA

## 14.1. UN number

UN-No.(DOT) : UN3077 UN-No. (TDG) : UN3077 UN-No. (IMDG) : 3077 UN-No. (IATA) : 3077

## 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Environmentally hazardous substances, solid, n.o.s.

Proper Shipping Name (TDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Proper Shipping Name (IATA) : Environmentally hazardous substance, solid, n.o.s.

## 14.3. Transport hazard class(es)

#### DOT

Transport hazard class(es) (DOT) : 9
Hazard labels (DOT) : 9



## **TDG**

Transport hazard class(es) (TDG) : 9
Hazard labels (TDG) : 9

#### **IMDG**

Transport hazard class(es) (IMDG) : 9
Danger labels (IMDG) : 9



#### IATA

Transport hazard class(es) (IATA) : 9
Danger labels (IATA) : 9





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# 14.4. Packing group

Packing group (DOT) : III
Packing group (TDG) : III
Packing group (IMDG) : III
Packing group (IATA) : III

# 14.5. Environmental hazards

Other information : No supplementary information available.

## 14.6. Special precautions for user

DOT

UN-No.(DOT) : UN3077



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DOT Special Provisions (49 CFR 172.102)

- : 8 A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies.
  - 146 This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination.
  - 335 Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s," UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leakproof when used as bulk packaging.
  - 384 For transportation by motor vehicle, substances meeting the conditions for high viscosity flammable liquids as prescribed in §173.121(b)(1)(i), (b)(1)(ii), and (b)(1)(iv) of this subchapter, may be reassigned to Packing Group III under the following conditions:
  - A112 Notwithstanding the quantity limits shown in Column (9A) and (9B) for this entry, the following IBCs are authorized for transportation aboard passenger and cargo-only aircraft. Each IBC may not exceed a maximum net quantity of 1,000 kg:
  - a. Metal: 11A, 11B, 11N, 21A, 21B and 21N
  - b. Rigid plastics: 11H1, 11H2, 21H1 and 21H2
  - c. Composite with plastic inner receptacle: 11HZ1, 11HZ2, 21HZ1 and 21HZ2
  - d. Fiberboard: 11G
  - e. Wooden: 11C, 11D and 11F (with inner liners)
  - f. Flexible: 13H2, 13H3, 13H4, 13H5, 13L2, 13L3, 13L4, 13M1 and 13M2 (flexible IBCs must be sift-proof and water resistant or must be fitted with a sift-proof and water resistant liner).
  - B54 Open-top, sift-proof rail cars are also authorized.
  - B120 The use of flexible bulk containers conforming to the requirements in subpart R and subpart S of part 178 of this subchapter is permitted.
  - IB8 Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).
  - IP3 Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner.
  - N20 A 5M1 multi-wall paper bag is authorized if transported in a closed transport vehicle.
  - N91 The use of a non specification sift-proof, non-bulk, metal can with or without lid, or a non specification sift-proof, non-bulk fiber drum, with or without lid is authorized when transporting coal tar pitch compounds by motor vehicle or rail freight. The fiber drum must to be fabricated with a three ply wall, as a minimum. The coal tar pitch compound must be in a solid mass during transportation.
  - T1 1.5 178.274(d)(2) Normal...... 178.275(d)(2)
  - TP33 The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx)

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EN (English) 9/12



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DOT Packaging Non Bulk (49 CFR 173.xxx) : 213

DOT Packaging Bulk (49 CFR 173.xxx) : 240

DOT Quantity Limitations Passenger aircraft/rail (49 : No Limit

CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49

CFR 175.75)

: No Limit

**DOT Vessel Stowage Location** 

: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

**TDG** 

UN-No. (TDG) : UN3077

TDG Special Provisions

: 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks).

- (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name:
- (a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S;
- (b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S;
- (c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S;
- (d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or
- (e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S.
- (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment:
- (a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or
- (b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS,99 (1) Mixtures of solids that are not dangerous goods and liquids or solids that are UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, or UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, may be handled, offered for transport or transported as UN3077 if there is no visible liquid when the dangerous goods are loaded into a means containment and during transport.
- (2) These Regulations, except for Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases) and Part 2 (Classification), do not apply to the handling, offering for transport or transporting of less than 450 kg of UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, or less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, on a road vehicle or a railway vehicle. The dangerous goods must be contained in one or more small means of containment designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no accidental release of the dangerous goods that could endanger public safety.

Explosive Limit and Limited Quantity Index : 5 kg
Excepted quantities (TDG) : E1
Emergency Response Guide (ERG) Number : 171

**IMDG** 

Special provisions (IMDG) : 274, 335, 966, 967, 969

Limited quantities (IMDG) : 5 kg

Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : LP02, P002

Special packing provisions (IMDG) : PP12



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IBC packing instructions (IMDG) : IBC08
IBC special provisions (IMDG) : B3

Tank instructions (IMDG) : BK1, BK2, BK3, T1

Tank special provisions (IMDG) : TP33

EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE

EmS-No. (Spillage) : S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS

Stowage category (IMDG) : A Stowage and handling (IMDG) : SW23

**IATA** 

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y956
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 956
PCA max net quantity (IATA) : 400kg
CAO packing instructions (IATA) : 956
CAO max net quantity (IATA) : 400kg

Special provisions (IATA) : A97, A158, A179, A197, A215

ERG code (IATA) : 9L

## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
metsulfuron-methyl	74223-64-6	Not present	-	

# EPA Registration Number 83100-2-83979 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 as required on the pesticide label.

FIFRA Signal Word Caution

## 15.2. International regulations

#### **CANADA**

## metsulfuron-methyl (74223-64-6)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### **EU-Regulations**

No additional information available



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#### **National regulations**

No additional information available

## 15.3. US State regulations

No additional information available

## **SECTION 16: Other information**

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#### Full text of hazard classes and H-statements

H332 Harmful if inhaled.

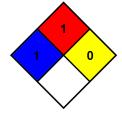
NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant

irritation

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire

conditions.



Hazard Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids,

solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT

react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : E - Safety glasses, Gloves, Dust respirator

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.