

SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier

Trade name : CONNEX®
 Code product : FH-009 - Metsulfuron-methyl 68 g/kg + Thifensulfuron-methyl 682 g/kg WG -

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

Main use category : Professional use
 Use of the substance/preparation : Agriculture Herbicide

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Albaugh Europe Sàrl
 World Trade Center Lausanne
 Avenue Gratta-Paille 2
 1018 Lausanne
 Switzerland
 Tel : +41 21 799 9130
sds@albaugh.eu

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Chemical Emergency Centre (UK)		01865 407333	24/7

SECTION 2: Hazards identification
2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aquatic Acute 1; H400
 Aquatic Chronic 1; H410

Full text of H-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard symbols :



Signal word (CLP) : Warning
 Hazard statements (CLP) : H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P273 - Avoid release to the environment.
 P391 - Collect spillage.
 P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

EUH phrases : EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.

PPP safety precautions : SP1 - Do not contaminate surface water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads.)

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Thifensulfuron-methyl	(CAS-Nr) 79277-27-3 (INDEX-Nr) 016-096-00-2	68.2	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Sodium polycarboxylate	(CAS-Nr) 37199-81-8	5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Sulfonated aromatic polymer, sodiumsalt		5 - 10	Skin Irrit. 2, H315 Eye Dam. 1, H318
Metsulfuron-methyl	(CAS-Nr) 74223-64-6 (INDEX-Nr) 613-139-00-2	6.8	Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410

Full text of H- and EUH-phrases: 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 : Rinse immediately with plenty of water. In case of an skin reaction, consult a physician.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).
- Unsuitable extinguishing media : High volume water jet.

5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire : Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, nitrogen oxides (NOx).

5.3. Advice for firefighters

- 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

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel. Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Wear a self-contained breathing apparatus and appropriate personal protective equipment (PPE).

6.2. Environmental precautions

Do not allow material to contaminate ground water system. Prevent entry to sewers, drains and public waters. Notify authorities if product enters drains, sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Sweep or shovel spills into appropriate container for disposal.
- Methods for cleaning up : Large spills: scoop solid spill into closing containers. On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
- Precautions for safe handling : Do not breathe spray, vapours. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Wear personal protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store tightly closed in a dry, cool and well-ventilated place.
- Incompatible materials : Oxidants, strong acids and strong bases.
- Storage area : Store away from heat.

7.3. Specific end use(s)

Professional use. See the label.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

No additional information available

8.2. Exposure controls

- Personal protective equipment : Avoid any unnecessary exposure. Use personal protective equipment that is clean and has been properly maintained. Store personal protective equipment in a clean place, away from the work area. Remove and wash contaminated clothing before re-using.
- Hand protection : Wear suitable protective gloves.
- Eye protection : Chemical goggles or safety glasses.
- Respiratory protection : Ensure that there is adequate ventilation, especially in confined areas.
- Other information : When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

- Physical state : Solid - water dispersible granules
- Appearance : Granules
- Colour : Off-white
- Odour : No characteristic odour
- Odour threshold : Not applicable
- pH : Not applicable
- pH solution : 5.64 at 25°C (1% solution, CIPAC MT 75.3)
- Relative evaporation rate (butylacetate=1) : Not applicable
- Melting point : Measured up to 171°C (active substance: Thifensulfuron-methyl); 158°C (active substance: Metsulfuron-methyl)
- Freezing point : No data available
- Boiling point : No data available
- Flash point : Not applicable
- Self ignition temperature : > 500 °C (ASTM E659)
- Decomposition temperature : No data available
- Flammability (solid, gas) : Not flammable (EEC A.10)
- Vapour pressure : Not applicable
- Relative vapour density at 20 °C : No data available
- Relative density : Tap density : 0.677 / Pour Density = 0.641g/mL (CIPAC MT 186)
- Density : Not applicable
- Solubility : Not applicable, mixture
- Log Pow : -1.65 à pH=7 (Active substance :Thifensulfuron-methyl)
-1.87 à pH=7 (Active substance: Metsulfuron-methyl)
- Log Kow : Not applicable, mixture
- Viscosity, kinematic : Not applicable
- Viscosity, dynamic : Not applicable
- Explosive properties : Not explosive (EEC A.14)
- Oxidising properties : Not oxidising (EEC A.17)
- Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable at normal handling- and storage conditions.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong acids. Strong bases. Oxidizing agent.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

CONNEX®	
LD50 oral rat	> 5000 mg/kg (OECD Guideline n°425)
LD50 dermal rat	> 5050 mg/kg (OECD Guideline n°402)
LC50 inhalation rat (mg/l)	> 2.12 mg/l/4h (OECD Guideline n°403)

Skin corrosion/irritation	: Not irritant to skin (OECD Guideline n°404)
Serious eye damage/irritation	: Not irritant to eyes (OECD Guideline n°405)
Respiratory or skin sensitisation	: Not skin sensitizing (OECD Guideline n°406)
Repeated dose toxicity	: Not classified
Carcinogenicity	: Not classified
Mutagenicity	: Not classified
Toxicity for reproduction	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified

11.2. Information on other hazards

Endocrine disrupting properties	: None
Other information	: None

SECTION 12: Ecological information

12.1.

CONNEX®	
ErC50 (Algae) 72h	0.219 mg/l (<i>Anabaena flos-aquae</i>) (OECD Guideline n°201)
EyC50 (Algae) 72h	0,041 mg/l (<i>Anabaena flos-aquae</i>) (OECD Guideline n°201)
NOEC (Algae) 72h	< 0,006 mg/l (<i>Anabaena flos-aquae</i>) (OECD Guideline n°201)
ErC50 (other aquatic plants) 7days	0.001042 mg/l (<i>Lemna gibba</i> L.) (OECD Guideline n°221)
EyC50 (other aquatic plants) 7days	0.000556 mg/l (<i>Lemna gibba</i> L.) (OECD Guideline n°221)
NOEC (other aquatic plants) 7days	0.000293 mg/l (<i>Lemna gibba</i> L.) (OECD Guideline n°221)

12.2. Persistence and degradability

Metsulfuron-methyl and thifensulfuron-methyl are not persistent in the environment. Metsulfuron-methyl and thifensulfuron-methyl are not readily biodegradable.

12.3. Bioaccumulative potential

Thifensulfuron-methyl (CAS n°: 79277-27-3)	
Log Pow	-1.65
Metsulfuron-methyl (CAS n°:74223-64-6)	
Log Pow	-1.87

12.4. Mobility in soil

Thifensulfuron-methyl: KFoc= 3 - 86 ml/g
 Metsulfuron-methyl : KFoc = 4 - 207 ml/g

12.5. Results of PBT and vPvB assessment

Metsulfuron-methyl and Thifensulfuron-methyl do not fulfil the criteria of a PBT or vPvB substance

12.6. Endocrine disrupting properties

None known

12.7. Other adverse effects

None known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No. (ADR) : 3077
 UN-No. (IMDG) : 3077
 UN-No. (IATA) : 3077
 UN-No. (ADN) : 3077
 UN-No. (RID) : 3077

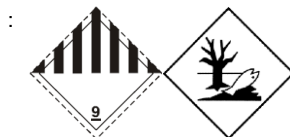
14.2. UN proper shipping name

Proper Shipping Name (ADR) : 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.
 Proper Shipping Name (ADN) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 Proper Shipping Name (RID) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 Transport document description (ADR) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Thifensulfuron-methyl/metsulfuron-methyl), 9, III, (E)
 Transport document description (IMDG) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Thifensulfuron-methyl/metsulfuron-methyl), 9, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
 Transport document description (IATA) : UN 3077 Environmentally hazardous substance, SOLID, n.o.s. (Thifensulfuron-methyl/metsulfuron-methyl), 9, III, ENVIRONMENTALLY HAZARDOUS
 Transport document description (ADN) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Thifensulfuron-methyl/metsulfuron-methyl), 9, III, ENVIRONMENTALLY HAZARDOUS
 Transport document description (RID) : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Thifensulfuron-methyl/metsulfuron-methyl), 9, III, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

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



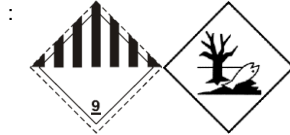
IMDG

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



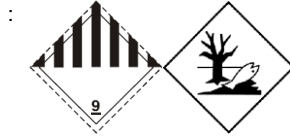
IATA

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



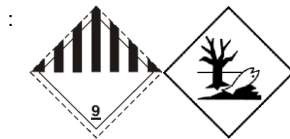
ADN

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



RID

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



14.4. Packing group

Packing group (ADR) : III
 Packing group (IMDG) : III
 Packing group (IATA) : III
 Packing group (ADN) : III
 Packing group (RID) : III

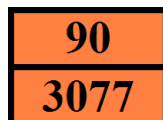
14.5. Environmental hazards

Dangerous for the environment : Yes
 Marine pollutant : Yes
 Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : M7
 Special provisions (ADR) : 274, 335, 601, 375
 Limited quantities (ADR) : 5kg
 Excepted quantities (ADR) : E1
 Packing instructions (ADR) : P002, IBC08, LP02, R001
 Special packing provisions (ADR) : PP12, B3
 Mixed packing provisions (ADR) : MP10
 Portable tank and bulk container instructions (ADR) : T1, BK1, BK2
 Portable tank and bulk container special provisions (ADR) : TP33
 Tank code (ADR) : SGAV, LGBV
 Vehicle for tank carriage : AT
 Transport category (ADR) : 3
 Special provisions for carriage - Packages (ADR) : V13
 Special provisions for carriage - Bulk (ADR) : VC1, VC2
 Special provisions for carriage - Loading, unloading and handling (ADR) : CV13
 Hazard identification number (Kemler No.) : 90
 Orange plates :



Tunnel restriction code (ADR) : -
 EAC code : 2Z

- Transport by sea

Special provisions (IMDG)	: 274, 335, 966, 967, 969
Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P002, LP02
Special packing provisions (IMDG)	: PP12
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: T1, BK1, BK2, BK3
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW23

- Air transport

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
ERG code (IATA)	: 9L

- Inland waterway transport

Classification code (ADN)	: M7
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 kg
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T* B**
Equipment required (ADN)	: PP, A
Number of blue cones/lights (ADN)	: 0

- Rail transport

Classification code (RID)	: M7
Special provisions (RID)	: 274, 335, 375, 601
Limited quantities (RID)	: 5kg
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P002, IBC08, LP02, R001
Special packing provisions (RID)	: PP12, B3
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T1, BK1, BK2
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAV, LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W13
Special provisions for carriage – Bulk (RID)	: VC1, VC2
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE11
Hazard identification number (RID)	: 90

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. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU-Regulations**

No REACH Annex XVII restrictions

Contains no REACH candidate substance

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

The mixture is registered as a plant protection product according to Regulation (EC) No.1107 / 2009.

SECTION 16: Other information

This MSDS supersedes all previous editions.

CONNEX® is a registered trademark of ALBAUGH.

Data sources

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Full text of H- and EUH-phrases:

Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Eye Irrit.2	Serious eye damage/eye irritation Category 2
Eye Dam. 1	Serious eye damage, Category 1.
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H319	Causes serious eye irritation.
H318	Causes serious eye damage.
H315	Causes skin irritation.

SDS EU (REACH Annex II)

Disclaimer: The information provided by Albaugh Europe Sàrl contained herein is given in good faith and correct to the best of our knowledge. However, the information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.