SAFETY DATA SHEET

ALLY® Lite

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	15.08.2025	50000130	Date of first issue: 15.08.2025

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : ALLY® Lite

Manufacturer or supplier's details

Company : FMC Agro Kazakhstan LLP

Address : str. Timiryazeva, 26/29
050040 Almaty
Kazakhstan

Telephone : 1 215 / 299-6000 (Corporate of

Emergency telephone : +44 20 3885 0382 (CHEMTREC's European Regional Toll-Free Number)
1 703 / 741-5970 (CHEMTREC - International)
1 703 / 527-3887 (CHEMTREC - Alternate)

Medical Emergency Number : All other countries: +1 651 / 632-6793 (Collect)

E-mail address : SDS-Info@fmc.com

Recommended use of the chemical and restrictions on use

Recommended use : Herbicide

Restrictions on use : Use as recommended by the label.

2. HAZARDS IDENTIFICATION

GHS Classification

Skin irritation : Category 3

Skin sensitization : Category 1

Specific target organ toxicity - repeated exposure : Category 2 (Thyroid, Nervous system)

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 1

GHS-Labeling

Hazard pictograms :

Signal Word : WARNING

Hazard Statements : H316 Causes mild skin irritation.
H317 May cause an allergic skin reaction.
H373 May cause damage to organs (Thyroid, Nervous system) through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements :

Prevention:

P260 Do not breathe dust.
P273 Avoid release to the environment.
P280 Wear protective gloves.

Response:

P314 Get medical advice/ attention if you feel unwell.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P391 Collect spillage.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Components

Chemical name	CAS-No.	Classification	MAC value mg/m3 / TSEL value	Concentration (% w/w)
Metsulfuron-methyl	74223-64-6	Aquatic Acute1; H400 Aquatic Chronic1; H410	No data available	>= 30 - < 50
tribenuron-methyl (ISO)	101200-48-0	Acute Tox.5; H333 Skin Sens.1; H317 STOT RE2; H373 (Thyroid, Nervous system) Aquatic Acute1; H400 Aquatic Chronic1; H410	No data available	>= 25 - < 30
D-Glucose, 4-O-β-D-galactopyranosyl-, monohydrate	64044-51-5	No data available	No data available	>= 20 - < 30
Alkylated Naphthalene Sulfonate Sodium Salt	68425-94-5	Eye Irrit.2A; H319	No data available	>= 2,5 - < 10

		Aquatic Acute3; H402 Aquatic Chronic3; H412		
kaolin	1332-58-7	Acute Tox.5; H333	No data available	>= 1 - < 10
Lignosulfonic acid, ethoxylated, sodium salts	68611-14-3	Skin Irrit.2; H315 Eye Irrit.2A; H319 STOT SE3; H335 (Respiratory system)	No data available	>= 1 - < 10
2-Pyrrolidinone, 1-ethenyl-, homopolymer	9003-39-8	Acute Tox.5; H303 Acute Tox.5; H313 Eye Irrit.2A; H319	MPC-STEL: 10 mg/m3 Class 4 - Low hazard Data Source: KZ OEL MPC-STEL: 10 mg/m3 Class 4 - Low hazard Data Source: RU OEL	>= 0,1 - < 1
sodium benzoate	532-32-1	Acute Tox.5; H303 Acute Tox.5; H313 Eye Irrit.2A; H319 Aquatic Acute3; H402	MPC-STEL: 5 mg/m3 Class 3 - Moderately dangerous Data Source: KZ OEL MPC-STEL: 5 mg/m3 Class 3 - Moderately dangerous Data Source: RU OEL	>= 0,025 - < 0,1
titanium dioxide	13463-67-7	No data available	MPC-TWA: 10 mg/m3 Class 4 - Low hazard, aerosols of predominantly fibrogenic action Data Source: KZ OEL MPC-TWA: 10 mg/m3 aerosols of pre-	< 0,1

			dominantly fibrogenic action, Class 4 - Low hazard Data Source: RU OEL	
2-pyrrolidone	616-45-5	Acute Tox.4; H302 Acute Tox.4; H312 Eye Irrit.2A; H319 Repr.1B; H360	MPC-STEL: 10 mg/m3 Class 4 - Low hazard Data Source: KZ OEL MPC-STEL: 10 mg/m3 Class 4 - Low hazard Data Source: RU OEL	< 0,1
Quartz (SiO2)	14808-60-7	Carc.1A; H350 STOT RE1; H372 (Lungs) STOT RE2; H373 (Immune system, Kidney)	MPC-TWA: 1 mg/m3 Class 2 - Highly dangerous, aerosols of predominantly fibrogenic action Data Source: KZ OEL MPC-STEL: 3 mg/m3 Class 2 - Highly dangerous, aerosols of predominantly fibrogenic action Data Source: KZ OEL MPC-TWA: 1 mg/m3 aerosols of predominantly fibrogenic action, Class 3 - Moderately dangerous Data Source: RU OEL MPC-STEL: 3 mg/m3 aerosols of predominantly fibro-	< 0,1

			genic action, Class 3 - Moderately dangerous Data Source: RU OEL	

For explanation of abbreviations see section 16.

4. FIRST AID MEASURES

General advice	:	Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	:	Remove to fresh air. If unconscious, place in recovery position and seek medical advice. If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambulance.
In case of skin contact	:	If on clothes, remove clothes. If on skin, rinse well with water. Wash off with soap and plenty of water. Get medical attention immediately if irritation develops and persists. Wash contaminated clothing before re-use.
In case of eye contact	:	Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital. Do not induce vomiting without medical advice.
Most important symptoms and effects, both acute and delayed	:	Causes mild skin irritation. May cause an allergic skin reaction. May cause damage to organs through prolonged or repeated exposure.
Protection of first-aiders	:	Avoid inhalation, ingestion and contact with skin and eyes.
Notes to physician	:	Treat symptomatically. Immediate medical attention is required in case of ingestion.

5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point	:	No data available
Ignition temperature	:	No data available
Upper explosion limit / Upper flammability limit	:	Not available for this mixture.
Lower explosion limit / Lower flammability limit	:	Not available for this mixture.
Flammability (solid, gas)	:	Does not sustain combustion.
Suitable extinguishing media	:	Dry chemical, CO2, water spray or regular foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	:	Do not spread spilled material with high-pressure water streams. High volume water jet
Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Fire may produce irritating, corrosive and/or toxic gases. Nitrogen oxides (NOx) Sulfur oxides Carbon oxides Hydrogen cyanide
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Remove all sources of ignition. Ensure adequate ventilation. Never return spills in original containers for re-use. Mark the contaminated area with signs and prevent access to unauthorized personnel. Only qualified personnel equipped with suitable protective equipment may intervene.
Environmental precautions	:	Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Avoid dust formation.
Provide appropriate exhaust ventilation at places where dust is formed.

Advice on safe handling : Avoid formation of respirable particles.
Do not breathe vapors/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

Further information on storage stability : No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2-Pyrrolidinone, 1-ethenyl-, homopolymer	9003-39-8	MPC-STEL (aerosol)	10 mg/m3	RU OEL

		Further information: Class 4 - Low hazard		
		MPC-STEL (aerosol)	10 mg/m3	KZ OEL
		Further information: Class 4 - Low hazard		
sodium benzoate	532-32-1	MPC-STEL (aerosol)	5 mg/m3	RU OEL
		Further information: Class 3 - Moderately dangerous		
		MPC-STEL (aerosol)	5 mg/m3	KZ OEL
		Further information: Class 3 - Moderately dangerous		
titanium dioxide	13463-67-7	MPC-TWA (aerosol)	10 mg/m3	RU OEL
		Further information: aerosols of predominantly fibrogenic action, Class 4 - Low hazard		
		MPC-TWA (aerosol)	10 mg/m3	KZ OEL
		Further information: Class 4 - Low hazard, aerosols of predominantly fibrogenic action		
2-pyrrolidone	616-45-5	MPC-STEL (aerosol)	10 mg/m3	RU OEL
		Further information: Class 4 - Low hazard		
		MPC-STEL (aerosol)	10 mg/m3	KZ OEL
		Further information: Class 4 - Low hazard		
Quartz (SiO2)	14808-60-7	MPC-TWA (Aerosol - total mass)	1 mg/m3	RU OEL
		Further information: aerosols of predominantly fibrogenic action, Class 3 - Moderately dangerous		
		MPC-STEL (Aerosol - total mass)	3 mg/m3	RU OEL
		Further information: aerosols of predominantly fibrogenic action, Class 3 - Moderately dangerous		
		TWA (Respirable dust)	0,1 mg/m3	2004/37/EC
		MPC-TWA (aerosol)	1 mg/m3	KZ OEL
		Further information: Class 2 - Highly dangerous, aerosols of predominantly fibrogenic action		
		MPC-STEL (total aerosols)	3 mg/m3	KZ OEL
		Further information: Class 2 - Highly dangerous, aerosols of predominantly fibrogenic action		

Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.

Hand protection

Material : Wear chemical resistant gloves, such as barrier laminate,

butyl rubber or nitrile rubber.

Remarks	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	:	Eye wash bottle with pure water Tightly fitting safety goggles
Skin and body protection	:	Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Protective measures	:	Plan first aid action before beginning work with this product. Always have on hand a first-aid kit, together with proper instructions. Wear suitable protective equipment. When using do not eat, drink or smoke. In the context of professional plant protection use as recommended, the end user must refer to the label and the instructions for use.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	:	solid
Color	:	brown, light brown
Odor	:	mild, lignin like
pH	:	No data available
Melting point/freezing point	:	Not available for this mixture.
Boiling point/boiling range	:	No data available
Flash point	:	No data available
Flammability (solid, gas)	:	Does not sustain combustion.
Upper explosion limit / Upper flammability limit	:	Not available for this mixture.
Lower explosion limit / Lower	:	Not available for this mixture.

flammability limit		
Vapor pressure	:	Not available for this mixture.
Relative vapor density	:	Not applicable
Relative density	:	Not available for this mixture.
Solubility(ies)		
Water solubility	:	dispersible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	Not applicable
Autoignition temperature	:	No data available
Decomposition temperature	:	Not available for this mixture.
Viscosity		
Viscosity, kinematic	:	Not applicable
Explosive properties	:	Not explosive
Oxidizing properties	:	The product is not oxidizing.
Particle size	:	No data available

10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed. Dust may form explosive mixture in air.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Avoid strong acids, bases, and oxidizers.
Hazardous decomposition products	:	No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Based on available data, the classification criteria are not met.

Product:

Acute inhalation toxicity : Acute toxicity estimate: > 10 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Components:

Metsulfuron-methyl:

Acute oral toxicity : LD50 (Rat, male and female): > 5.000 mg/kg
Method: US EPA Test Guideline OPP 81-1
Assessment: The substance or mixture has no acute oral toxicity

LD50 (Rat, female): > 5.000 mg/kg
Method: OECD Test Guideline 425
GLP: yes
Assessment: The substance or mixture has no acute oral toxicity
Remarks: no mortality

Acute inhalation toxicity : LC50 (Rat, male and female): > 5,11 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Symptoms: Breathing difficulties
GLP: yes
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: no mortality

Acute dermal toxicity : LD50 (Rabbit, male and female): > 5.000 mg/kg
Method: OECD Test Guideline 402
Symptoms: Irritation
GLP: yes
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: no mortality

tribenuron-methyl (ISO):

Acute oral toxicity : LD50: > 5.000 mg/kg
Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50 (Rat): > 5,14 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 402

D-Glucose, 4-O-β-D-galactopyranosyl-, monohydrate:

Acute oral toxicity : LD50 (Rat): > 10.000 mg/kg

Alkylated Naphthalene Sulfonate Sodium Salt:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

kaolin:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401

LD50: > 2.000 mg/kg
Method: OECD Test Guideline 420
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50: 5,07 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 436

Acute dermal toxicity : LD50 (Rat): > 5.000 mg/kg

LD50: > 2.000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Lignosulfonic acid, ethoxylated, sodium salts:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

2-Pyrrolidinone, 1-ethenyl-, homopolymer:

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg
Method: OECD Test Guideline 402

sodium benzoate:

Acute oral toxicity : LD50 (Rat, male and female): 3.450 mg/kg

Acute inhalation toxicity : LC0 (Rat, male and female): > 12,2 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Remarks: no mortality
Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2.000 mg/kg

titanium dioxide:

Acute oral toxicity : LD50 (Rat, male and female): > 2.000 mg/kg
Method: OECD Test Guideline 401
Assessment: The substance or mixture has no acute oral tox-

icity

Acute inhalation toxicity : LC50 (Rat, male): 3,43 - 5,09 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

2-pyrrolidone:

Acute oral toxicity : LD50 (Rat, male and female): 2.000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC0 (Rat, male and female): > 0,061 mg/l
Exposure time: 8 h
Test atmosphere: vapor
Method: OECD Test Guideline 403
Remarks: no mortality

Acute dermal toxicity : LD50 (Rabbit, male and female): 2.000 mg/kg
Method: OECD Test Guideline 402

Quartz (SiO2):

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5,01 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 436
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Based on data from similar materials

Skin corrosion/irritation

Causes mild skin irritation.

Product:

Remarks : May cause skin irritation and/or dermatitis.

Components:

Metsulfuron-methyl:

Species : Rabbit
Assessment : Not classified as irritant
Method : US EPA Test Guideline OPP 81-5
Result : No skin irritation

tribenuron-methyl (ISO):

Species	:	Rabbit
Assessment	:	Not classified as irritant
Method	:	OECD Test Guideline 404
Remarks	:	May cause mild irritation. Based on available data, the classification criteria are not met.

Alkylated Naphthalene Sulfonate Sodium Salt:

Remarks	:	No data available

kaolin:

Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Lignosulfonic acid, ethoxylated, sodium salts:

Result	:	Skin irritation

sodium benzoate:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

titanium dioxide:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

2-pyrrolidone:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Quartz (SiO2):

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation
Remarks	:	Based on data from similar materials

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Product:

Remarks	:	Product dust may be irritating to eyes, skin and respiratory system.

Components:

Metsulfuron-methyl:

Species	:	Rabbit
Result	:	slight irritation
Assessment	:	Not classified as irritant
Method	:	EPA OPP 81-4

tribenuron-methyl (ISO):

Species	:	Rabbit
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405
Remarks	:	May cause mild irritation. Based on available data, the classification criteria are not met.

Alkylated Naphthalene Sulfonate Sodium Salt:

Result	:	Eye irritation

kaolin:

Result	:	No eye irritation
Method	:	OECD Test Guideline 405

Lignosulfonic acid, ethoxylated, sodium salts:

Result	:	Moderate eye irritation

2-Pyrrolidinone, 1-ethenyl-, homopolymer:

Result	:	Irritation to eyes, reversing within 21 days

sodium benzoate:

Species	:	Rabbit
Result	:	Eye irritation
Method	:	OECD Test Guideline 405

titanium dioxide:

Species	:	Rabbit
Result	:	No eye irritation
Method	:	OECD Test Guideline 405

2-pyrrolidone:

Species	:	Rabbit
Result	:	Moderate eye irritation
Method	:	OECD Test Guideline 405

Quartz (SiO2):

Species	:	Rabbit
Result	:	No eye irritation
Method	:	OECD Test Guideline 405
Remarks	:	Based on data from similar materials

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Based on available data, the classification criteria are not met.

Product:

Remarks : Causes sensitization.

Components:

Metsulfuron-methyl:

Test Type	:	Maximization Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	US EPA Test Guideline OPPTS 870.2600
Result	:	Not a skin sensitizer.

tribenuron-methyl (ISO):

Test Type	:	Maximization Test
Species	:	Guinea pig
Assessment	:	May cause sensitization by skin contact.
Method	:	OECD Test Guideline 406
Result	:	Causes skin sensitization.

kaolin:

Method	:	OECD Test Guideline 429
Result	:	Does not cause skin sensitization.

2-Pyrrolidinone, 1-ethenyl-, homopolymer:

Routes of exposure	:	Skin contact
Species	:	Mouse
Result	:	Does not cause skin sensitization.

sodium benzoate:

Test Type	:	Local lymph node assay (LLNA)
Species	:	Mouse
Result	:	Does not cause skin sensitization.

titanium dioxide:

Test Type	:	Local lymph node assay (LLNA)
Species	:	Mouse
Method	:	OECD Test Guideline 429
Result	:	Not a skin sensitizer.

2-pyrrolidone:

Test Type : Local lymph node assay (LLNA)

Species	:	Mouse
Method	:	OECD Test Guideline 429
Result	:	Does not cause skin sensitization.

Quartz (SiO2):

Test Type	:	Local lymph node assay (LLNA)
Species	:	Mouse
Method	:	OECD Test Guideline 429
Result	:	Does not cause skin sensitization.
Remarks	:	Based on data from similar materials

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Components:

Metsulfuron-methyl:

Genotoxicity in vitro	:	Test Type: Ames test Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative GLP: yes Test Type: Chromosome aberration test in vitro Metabolic activation: Metabolic activation Result: positive GLP: yes
Genotoxicity in vivo	:	Test Type: Micronucleus test Species: Mouse Result: negative

tribenuron-methyl (ISO):

Germ cell mutagenicity - Assessment	:	Did not show mutagenic effects in animal experiments.

kaolin:

Genotoxicity in vitro	:	Test Type: Ames test Method: OECD Test Guideline 471 Result: negative
Genotoxicity in vivo	:	Remarks: No data available

2-Pyrrolidinone, 1-ethenyl-, homopolymer:

Genotoxicity in vitro	:	Test Type: Ames test Result: negative
Genotoxicity in vivo	:	Test Type: Micronucleus test Species: Mouse Result: negative

sodium benzoate:

Genotoxicity in vitro : Test Type: reverse mutation assay
Method: OECD Test Guideline 471
Result: negative

Genotoxicity in vivo : Test Type: chromosome aberration assay
Species: Rat (male)
Application Route: Ingestion
Method: OECD Test Guideline 475
Result: negative

titanium dioxide:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster ovary cells
Method: OECD Test Guideline 473
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse
Method: OECD Test Guideline 474
Result: negative

2-pyrrolidone:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Application Route: Intraperitoneal injection
Method: OECD Test Guideline 474
Result: negative

Germ cell mutagenicity - Assessment : Weight of evidence does not support classification as a germ cell mutagen.

Quartz (SiO2):

Genotoxicity in vitro : Test Type: reverse mutation assay
Result: negative
Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Rat
Method: OECD Test Guideline 474
Result: negative
Remarks: Based on data from similar materials

Carcinogenicity

Based on available data, the classification criteria are not met.

Components:

Metsulfuron-methyl:

Species	:	Rat, male and female
Exposure time	:	104 weeks
NOAEL	:	500 ppm
Result	:	negative

Species	:	Mouse, male and female
Exposure time	:	18 month(s)
NOAEL	:	5.000 ppm
Result	:	negative

tribenuron-methyl (ISO):

Remarks	:	No significant adverse effects were reported
Carcinogenicity - Assessment	:	Did not show carcinogenic effects in animal experiments.

sodium benzoate:

Species	:	Rat, male and female
Application Route	:	Oral
Exposure time	:	730 d
Result	:	negative

titanium dioxide:

Species	:	Mouse, male and female
Application Route	:	Oral
Exposure time	:	103 weeks
Result	:	negative

Species	:	Rat, male and female
Application Route	:	Inhalation
Exposure time	:	2 Years
Result	:	negative

Quartz (SiO2):

Carcinogenicity - Assessment	:	Human carcinogen.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Components:

Metsulfuron-methyl:

Effects on fertility	:	Test Type: Two-generation study Species: Rat, male and female Application Route: Oral Result: negative
Effects on fetal development	:	Test Type: Embryo-fetal development

Species: Rabbit, female
Application Route: Ingestion
Symptoms: Maternal effects.
Result: negative

Test Type: Embryo-fetal development
Species: Rat, female
Application Route: Ingestion
Symptoms: Maternal effects.
Result: negative

tribenuron-methyl (ISO):

Reproductive toxicity - Assessment : No toxicity to reproduction
Animal testing did not show any effects on fetal development., Did not show teratogenic effects in animal experiments.

kaolin:

Effects on fertility : Remarks: No data available

Effects on fetal development : Remarks: No data available

sodium benzoate:

Effects on fertility : Test Type: Two-generation study
Species: Rat, male and female
Application Route: Oral
Result: negative

Effects on fetal development : Test Type: reproductive and developmental toxicity study
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 414
Result: negative

titanium dioxide:

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
Application Route: Oral
Method: OECD Test Guideline 414
Result: negative

2-pyrrolidone:

Effects on fetal development : Test Type: reproductive and developmental toxicity study
Species: Rabbit
Application Route: Ingestion
General Toxicity Maternal: LOAEL: 500 mg/kg body weight
Developmental Toxicity: LOAEL: 1.000 mg/kg body weight
Embryo-fetal toxicity.: LOAEL: 500 mg/kg body weight
Symptoms: Reduced body weight, Reduced fetal weight., Effects on fetal development., Visceral malformations.
Target Organs: Heart
Method: OECD Test Guideline 414

Reproductive toxicity - Assessment	:	Clear evidence of adverse effects on sexual function and fertility, based on animal experiments.

STOT-single exposure

Based on available data, the classification criteria are not met.

Components:

tribenuron-methyl (ISO):

Assessment	:	The substance or mixture is not classified as specific target organ toxicant, single exposure.

kaolin:

Remarks	:	No significant adverse effects were reported

Lignosulfonic acid, ethoxylated, sodium salts:

Assessment	:	May cause respiratory irritation.

STOT-repeated exposure

May cause damage to organs (Thyroid, Nervous system) through prolonged or repeated exposure.

Components:

tribenuron-methyl (ISO):

Target Organs	:	Thyroid, Nervous system
Assessment	:	May cause damage to organs through prolonged or repeated exposure.

kaolin:

Assessment	:	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

2-pyrrolidone:

Assessment	:	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Quartz (SiO2):

Routes of exposure	:	Inhalation
Target Organs	:	Lungs
Assessment	:	The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1.
Routes of exposure	:	Inhalation
Target Organs	:	Immune system, Kidney
Assessment	:	The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Repeated dose toxicity

Components:

Metsulfuron-methyl:

Species	:	Rat, male and female
NOEL	:	1000 ppm
Application Route	:	Oral - feed
Exposure time	:	90 days
Symptoms	:	Reduced body weight

tribenuron-methyl (ISO):

Species	:	Rabbit
LOAEL	:	80 mg/kg
Target Organs	:	Thyroid, Nervous system
Assessment	:	The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.
Remarks	:	Increased mortality or reduced survival

kaolin:

Remarks	:	No data available

sodium benzoate:

Species	:	Rat, male and female
NOAEL	:	1.000 mg/kg
Application Route	:	Oral - feed

titanium dioxide:

Species	:	Rat
NOAEL	:	1.000 mg/kg
Application Route	:	Ingestion
Method	:	OECD Test Guideline 408

Species	:	Mouse, female
LOAEC	:	0,0108 mg/l
Application Route	:	inhalation (dust/mist/fume)
Exposure time	:	13 weeks

2-pyrrolidone:

Species	:	Rat, male and female
NOAEL	:	207 mg/kg
Application Route	:	Oral
Exposure time	:	90 d
Method	:	OECD Test Guideline 408

Quartz (SiO2):

Species	:	Rat
LOAEC	:	0,0025 mg/l
Application Route	:	Inhalation
Exposure time	:	90 day
Method	:	OECD Test Guideline 413

Target Organs : Lungs
Remarks : Based on data from similar materials

Aspiration toxicity

Based on available data, the classification criteria are not met.

Components:

tribenuron-methyl (ISO):

The substance does not have properties associated with aspiration hazard potential.

Neurological effects

Components:

Metsulfuron-methyl:

No neurotoxicity observed in animal studies.

Further information

Product:

Remarks : No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Metsulfuron-methyl:

Toxicity to fish : LC50 (Poecilia reticulata (guppy)): > 100 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 120 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202

EC50 (Daphnia magna (Water flea)): 43,1 mg/l
End point: Immobilization
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants : ErC50 (Anabaena flos-aquae (cyanobacterium)): 65,7 µg/l
Exposure time: 96 h
Method: OPPTS 850.5400
GLP: yes

NOEC (Anabaena flos-aquae (cyanobacterium)): 45 µg/l
Exposure time: 96 h
Method: OPPTS 850.5400

GLP: yes

ErC50 (Selenastrum capricornutum (green algae)): 157 µg/l
Exposure time: 72 h
GLP: yes

NOEC (Selenastrum capricornutum (green algae)): 50 µg/l
Exposure time: 72 h
GLP: yes

M-Factor (Acute aquatic toxicity) : 10

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 68 mg/l
Exposure time: 21 d

NOEC (Pimephales promelas (fathead minnow)): 10 mg/l
End point: reproduction
Exposure time: 21 d
Method: OECD Test Guideline 229
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 3,13 mg/l
End point: reproduction
Exposure time: 21 d
Test Type: semi-static test
Method: OECD Test Guideline 211

NOEC (Daphnia magna (Water flea)): 0,5 mg/l
Exposure time: 21 d

M-Factor (Chronic aquatic toxicity) : 1

Toxicity to soil dwelling organisms : NOEC (Eisenia fetida (earthworms)): 6 mg/kg
Exposure time: 56 d

NOEC (Eisenia fetida (earthworms)): 5,6 mg/kg
End point: reproduction
Method: OECD Test Guideline 222
GLP: yes

Method: OECD Test Guideline 216
Remarks: No significant adverse effect on Nitrogen mineralization.

Toxicity to terrestrial organisms : LD50 (Apis mellifera (bees)): > 50 µg/bee
Exposure time: 48 h
End point: Acute contact toxicity
Method: OEPP/EPPO Test Guideline 170

LD50 (Apis mellifera (bees)): > 50 µg/bee
Exposure time: 48 h
End point: Acute oral toxicity
Method: OEPP/EPPO Test Guideline 170

LD50 (Anas platyrhynchos (Mallard duck)): > 2.510 mg/kg

NOEC (Colinius virginianus): 1.000 mg/kg
End point: Reproduction Test

NOEC (Anas platyrhynchos (Mallard duck)): 1.000 ppm
End point: Reproduction Test
Method: OECD Test Guideline 206

tribenuron-methyl (ISO):

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 738 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Crustaceans): > 320 mg/l Exposure time: 48 h EC50 (Daphnia magna (Water flea)): > 894 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 0,0208 mg/l Exposure time: 120 h EC50 (Lemna gibba (duckweed)): 0,00424 mg/l Exposure time: 14 d
Toxicity to fish (Chronic toxicity)	:	NOEC (Cyprinodon variegatus (sheepshead minnow)): 114 mg/l Exposure time: 21 d Method: OECD Test Guideline 211 NOEC (Oncorhynchus mykiss (rainbow trout)): 560 mg/l Exposure time: 21 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 41 mg/l Exposure time: 21 d
Toxicity to soil dwelling organisms	:	NOEC (Eisenia fetida (earthworms)): 3,2 mg/kg Exposure time: 56 d
Toxicity to terrestrial organisms	:	LD50 (Colinus virginianus (Bobwhite quail)): > 2.250 mg/kg LD50 (Colinus virginianus (Bobwhite quail)): > 5.620 ppm Remarks: Dietary LD50 (Anas platyrhynchos (Mallard duck)): > 5.620 ppm Remarks: Dietary LD50 (Apis mellifera (bees)): > 98.4 µg/bee Exposure time: 48 h End point: Acute contact toxicity

LD50 (Apis mellifera (bees)): > 9.1 µg/bee
Exposure time: 48 h
End point: Acute oral toxicity

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

D-Glucose, 4-O-β-D-galactopyranosyl-, monohydrate:

Toxicity to fish : Remarks: No data available

Alkylated Naphthalene Sulfonate Sodium Salt:

Toxicity to fish : LC50 (Zebra fish): > 10 - 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials

EC10 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC10 (Daphnia magna (Water flea)): > 10 - 100 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211
Remarks: Based on data from similar materials

kaolin:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1.000 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Raphidocelis subcapitata (freshwater green alga)): > 100 mg/l

Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

2-Pyrrolidinone, 1-ethenyl-, homopolymer:

Toxicity to fish : LC50 (Fish): > 1.000 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic plants : EC50 (algae): > 1.000 mg/l
Exposure time: 72 h

sodium benzoate:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 484 mg/l
Exposure time: 96 h
Method: EPA OPP 72-1

Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): > 30,5 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOEC (Danio rerio (zebra fish)): 10 mg/l
Exposure time: 6 d

Toxicity to microorganisms : NOEC (sewage treatment plant microorganisms): > 100 mg/l
Exposure time: 168 h

titanium dioxide:

Toxicity to fish : LC50 (Carassius auratus (goldfish)): > 100 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.000 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Lemna minor (duckweed)): > 100 mg/l
Exposure time: 7 d

Toxicity to microorganisms : EC50: >= 1.000 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition

2-pyrrolidone:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 4.600 mg/l
Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 500 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): 500 mg/l Exposure time: 72 h
Toxicity to fish (Chronic toxicity)	:	(Fish): 598,9 mg/l Exposure time: 30 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	(Daphnia sp. (Water flea)): 160,2 mg/l Exposure time: 21 d Method: QSAR
Toxicity to microorganisms	:	EC50 (activated sludge): 1.000 mg/l Exposure time: 0,5 h Method: OECD Test Guideline 209

Quartz (SiO2):

Toxicity to fish	:	LC50 (Cyprinus carpio (Carp)): > 10.000 mg/l Exposure time: 72 h

Persistence and degradability

Components:

Metsulfuron-methyl:

Biodegradability	:	Result: Not readily biodegradable. Remarks: Primary degradation half-lives vary with circumstances, from a few weeks to a few months in aerobic soil and water.

tribenuron-methyl (ISO):

Biodegradability	:	Biodegradation: 29,4 % Exposure time: 28 d

D-Glucose, 4-O-β-D-galactopyranosyl-, monohydrate:

Biodegradability	:	Remarks: No data available

Alkylated Naphthalene Sulfonate Sodium Salt:

Biodegradability	:	Result: Not readily biodegradable. Remarks: Based on data from similar materials

kaolin:

Biodegradability	:	Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

Lignosulfonic acid, ethoxylated, sodium salts:

Biodegradability : Result: Not readily biodegradable.

2-Pyrrolidinone, 1-ethenyl-, homopolymer:

Biodegradability : Zahn-Wellens Test
Result: Readily biodegradable.
Biodegradation: 98 %
Exposure time: 9 d

sodium benzoate:

Biodegradability : Result: Readily biodegradable.
Biodegradation: >= 50 %
Exposure time: 60 d
Method: OECD Test Guideline 311

titanium dioxide:

Biodegradability : Remarks: The methods for determining the biological degradability are not applicable to inorganic substances.

2-pyrrolidone:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 98 %
Exposure time: 9 d
Method: OECD Test Guideline 302B

Quartz (SiO2):

Biodegradability : Result: Not biodegradable

Bioaccumulative potential

Components:

Metsulfuron-methyl:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Bioconcentration factor (BCF): < 1
Exposure time: 28 d
Remarks: Does not bioaccumulate.

Partition coefficient: n-octanol/water : Pow: 0,018 (25 °C)
log Pow: -1,7 (25 °C)
pH: 7

tribenuron-methyl (ISO):

Bioaccumulation : Bioconcentration factor (BCF): < 1
Remarks: Does not bioaccumulate.

Partition coefficient: n-octanol/water : log Pow: -0,38

kaolin:

Bioaccumulation	:	Remarks: Bioaccumulation is unlikely.
Partition coefficient: n-octanol/water	:	Remarks: Not applicable

2-Pyrrolidinone, 1-ethenyl-, homopolymer:

Partition coefficient: n-octanol/water	:	log Pow: -0,71 (20 °C)

sodium benzoate:

Bioaccumulation	:	Remarks: Bioaccumulation is unlikely.
Partition coefficient: n-octanol/water	:	log Pow: 1,88 Remarks: Based on data from similar materials

2-pyrrolidone:

Bioaccumulation	:	Species: Fish Bioconcentration factor (BCF): 3,16
Partition coefficient: n-octanol/water	:	log Pow: -0,71 (20 °C)

Quartz (SiO2):

Bioaccumulation	:	Remarks: Does not bioaccumulate.

Mobility in soil

Components:

Metsulfuron-methyl:

Distribution among environmental compartments	:	Remarks: Under normal conditions the substance/mixture is mobile in soil.

tribenuron-methyl (ISO):

Distribution among environmental compartments	:	Remarks: Under normal conditions the active ingredient/s is/are of high to intermediate mobility in soil. There is a potential for leaching to groundwater.

kaolin:

Distribution among environmental compartments	:	Remarks: Low mobility in soil.

Other adverse effects

Product:

Additional ecological information	:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

Hygienic standards:

(Allowable concentration in air, water, including fishery waters, soil)

Components	Air	Water	Soil	Data Source
Metsulfuron-methyl 74223-64-6	No data available	MPC: 0,007 Milligrams per cubed decimeter Limiting health hazard indicator: toxic Hazard class: 3	No data available	List 5
tribenuron-methyl (ISO) 101200-48-0	No data available	MPC: 0,2 Milligrams per cubed decimeter Limiting health hazard indicator: sanitary - violation of environmental conditions: changing trophic water bodies fishery; hydrochemical parameters: oxygen, nitrogen, phosphorus, pH, impaired self-purification of water bodies of water fishery: BOD5 (biochemical oxygen demand for 5 days), the number of saprophytic microflora Hazard class: 3 MPC: 0,1 Milligrams per cubed decimeter Limiting health hazard indicator: sanitary and toxicological effects Hazard class: 3	No data available	List 5
D-Glucose, 4-O-β-D-galactopyranosyl-, monohydrate 64044-51-5	TSEL: 0,1 mg/m3	No data available	No data available	List 2
2-Pyrrolidinone, 1-ethenyl-, homopolymer 9003-39-8	MPC - average: 0,15 mg/m3 Limiting health hazard indicator: resorp-	MPC: 0,1 Milligrams per cubed decimeter Limiting health	No data available	List 1 List 3 List 5

	tive Hazard class: Class 4 - low hazard MPC - maximum: 0,5 mg/m3 Limiting health hazard indicator: resorptive Hazard class: Class 4 - low hazard	hazard indicator: toxic Hazard class: 4 TSEL: 1 mg/l Limiting health hazard indicator: general sanitary Hazard class: Class 4 - low hazard		
sodium benzoate 532-32-1	TSEL: 0,05 mg/m3	TSEL: 0,1 mg/l Limiting health hazard indicator: general sanitary Hazard class: Class 3 - moderately dangerous	No data available	List 2 List 3
titanium dioxide 13463-67-7	TSEL: 0,5 mg/m3	MPC: 1 Milligrams per cubed decimeter (in recalc on substance 0.5) Limiting health hazard indicator: toxic Hazard class: 4 MPC: 0,06 Milligrams per cubed decimeter (Titanium) Limiting health hazard indicator: toxic Hazard class: 4	No data available	List 2 List 5
2-pyrrolidone 616-45-5	MPC - average: 0,04 mg/m3 Limiting health hazard indicator: Reflectory-resorptive Hazard class: Class 3 - moderately dangerous MPC - maximum: 0,08 mg/m3 Limiting health hazard indicator: Reflectory-resorptive Hazard class: Class 3 - moderately dangerous	No data available	No data available	List 1

Quartz (SiO2) 14808-60-7	MPC - maximum: 0,3 mg/m3 Limiting health hazard indicator: resorptive Hazard class: Class 3 - moderately dangerous MPC - average: 0,1 mg/m3 Limiting health hazard indicator: resorptive Hazard class: Class 3 - moderately dangerous	MPC: 10 Milligrams per cubed decimeter Limiting health hazard indicator: organoleptic Hazard class: 3	No data available	List 1 List 5

For explanation of abbreviations see section 16.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Triple rinse containers.
Do not re-use empty containers.
Packaging that is not properly emptied must be disposed of as the unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

ADR

UN number : UN 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Metsulfuron-methyl, Tribenuron-methyl)
Class : 9
Packing group : III
Labels : 9
Hazard Identification Number : 90
Tunnel restriction code : (-)
Environmentally hazardous : yes

UNRTDG

UN number : UN 3077

Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Metsulfuron-methyl, Tribenuron-methyl)
Class	:	9
Subsidiary risk	:	ENVIRONM.
Packing group	:	III
Labels	:	9 (ENVIRONM.)

IATA-DGR

UN/ID No.	:	UN 3077
Proper shipping name	:	Environmentally hazardous substance, solid, n.o.s. (Metsulfuron-methyl, Tribenuron-methyl)
Class	:	9
Packing group	:	III
Labels	:	Miscellaneous
Packing instruction (cargo aircraft)	:	956
Packing instruction (passenger aircraft)	:	956
Environmentally hazardous	:	yes

IMDG-Code

UN number	:	UN 3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Metsulfuron-methyl, Tribenuron-methyl)
Class	:	9
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Marine pollutant	:	yes

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

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

The ingredients of this product are reported in the following inventories:

TCSI	:	Not in compliance with the inventory
TSCA	:	Product contains substance(s) not listed on TSCA inventory.
AIIC	:	Not in compliance with the inventory
DSL	:	This product contains the following components that are not on the Canadian DSL nor NDSL.

		Metsulfuron-methyl tribenuron-methyl (ISO)
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	Not in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

16. OTHER INFORMATION

Full text of H-Statements

H302	Harmful if swallowed.
H303	May be harmful if swallowed.
H312	Harmful in contact with skin.
H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H333	May be harmful if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled.
H400	Very toxic to aquatic life.
H402	Harmful to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Carc.	:	Carcinogenicity
Eye Irrit.	:	Eye irritation
Repr.	:	Reproductive toxicity
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitization
STOT RE	:	Specific target organ toxicity - repeated exposure
STOT SE	:	Specific target organ toxicity - single exposure

2004/37/EC	:	Europe. Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens, mutagens or reprotoxic substances at work - Annex III
KZ OEL	:	Kazakhstan. Order of the Ministry of Health No. KP DCM-70, Annex 2, Table 1 and Annex 3, Table 1 & 7 Maximum permissible concentration (MPC) of harmful substances in the air of the working area
RU OEL	:	SanPiN 1.2.3685-21 Table 2.1 Maximum permissible concentrations (MPC) of pollutants in the air of the working area
2004/37/EC / TWA	:	Long term exposure limit
KZ OEL / MPC-STEL	:	Maximum Permissible Concentration - Short Term Exposure
KZ OEL / MPC-TWA	:	Maximum Permissible Concentration - Time Weighted Average
RU OEL / MPC-STEL	:	Maximum Permissible Concentration - Short Term Exposure
RU OEL / MPC-TWA	:	Maximum Permissible Concentration - Time Weighted Average
List 1	:	SanPiN 1.2.3685-21 Table 1.1 Maximum permissible concentration (MPC) of pollutants in the air of urban and rural settlements
List 2	:	SanPiN 1.2.3685-21 Table 1.2 Tentative Safe Exposure Levels (TSEL) of pollutants in the air of urban and rural settlements
List 3	:	SanPiN 1.2.3685-21 Table 3.14 Indicative permissible levels (TAC) of chemicals in the water of drinking systems of centralized, including hot, and non-centralized water supply, water of ground and surface water bodies of drinking and cultural and domestic water use, water of swimming pools, water parks
List 5	:	Order of the Russian Federal Fisheries Agency "Standards of maximum permissible concentrations of harmful substances in fishery water bodies"

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quanti-

tative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

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