

Safety data sheet in accordance with Regulation (EC) No.1907/2006

Prepared : December 28, 2010

Version : 8 Revised : March 10, 2020

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

1.1 Product identifier

Tebufenozide 240 SC

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

Insecticide for agriculture use

1.3 Details of the supplier of the safety data sheet

Company Name : Nisso Chemical Europe GmbH

Address : Berliner Allee 42

40212 Düsseldorf

Germany

Telephone Number : +49-(0)211-130 66 86 0

Telefax Number : +49-(0)211-328231

Email: : sds@nisso-chem.de

1.4 Emergency Telephone Number: CHEMTREC +1-703-741-5970 (24-hour)

2. HAZARDS IDENTIFICATION

2.1 Classification of the mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008



Hazard pictogram GHS09

Signal word Warning

Hazard statement

H410 Very toxic to aquatic life with long lasting effects

EUH208 Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction.

EUH401 To avoid risks to human health and the environment, comply with the instructions for use

Precautionary statement

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with local/national/international regulations.

SP 1 Do not contaminate 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

This product does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex X III.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

CAS No.	EC No.	Index No./REACH Registration No.	% (wt/wt)	Substance name	Classification according to Regulation (EU) No1272/2008
112410-23-8	412-850-3	616-076-00-9 /—	23.2	N-tert-butyl-N'-(4-ethylbenzoyl)-3,5-dimethylbenzohydrazide (ISO name: Tebufenozide)	Aquatic Chronic 2;H411
Claimed confidential by the supplier	-	— /—	2.0	Sodium alkylnaphtalenesulfonate, formaldehyde condensate	Skin Irrit.2; H315 Eye Irrit.2;H319
78330-21-9	616-609-5	— /—	1.0	Polyoxyethylene tridecyl alcohol	Acute Tox.4; H302 Eye Dam.1; H318
2634-33-5	220-120-9	613-088-00-6 /—	0.06	1,2-benzisothiazolin-3-on	Acute Tox4; H302, Skin Irrit.2;H315, Eye Dam 1; H318, Skin Sens.1;H317*, Aquatic Acute 1;H400
—	—	—	Balance	Inert ingredients	—

*Specific Concentration Limits and M Factors Concentration $0.05\% \leq C$: Classification, Skin sens.1; H317

4. FIRST AID MEASURES

4.1 Description of first aid measures

4.1.1 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.

4.1.2 Skin Contact: Remove contaminated clothing and shoes, and wash with plenty water and soap. If skin irritation occurs: Get medical advice/attention.

4.1.3 Inhalation: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

4.1.4 Ingestion: Rinse mouth. Call a POISON CENTER/doctor if you feel unwell. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Not available

4.3 Indication of any immediate medical attention and special treatment needed

No specific antidote. Supportive care. Treatment based on judgment of physician in response to symptoms of patient.

5. FIRE - FIGHTING MEASURES

5.1 Extinguishing media : Carbon dioxide, foam, dry chemical or water spray.

Unsuitable extinguishing media : Not known

5.2 Special hazards arising from the substance or mixture

Thermal decomposition may produce harmful and irritant gas/fume such as nitrogen oxides, carbon dioxide, carbon monoxide, isobutylene and organic compounds.

5.3 Advice for firefighters

Protective equipment : Wear self-contained breathing apparatus and complete personal protective equipment.

Other information : Move containers away from fire areas if it can be done without risk. If impossible to remove containers from fire zone, cool them with water spray.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precaution, protective equipment and emergency procedures

Wear personal protective equipment. Refer to Section 8 for personal protective equipment.

Keep away from all ignition sources. Avoid contact with skin, eyes and clothing.

Avoid breathing the mist or vapor.

6.2 Environmental precautions:

Avoid discharging this product or its solution into drains, ditches, river, sea or lake etc.

6.3 Methods and material for containment and cleaning up

Obey local/national/international regulations for health & safety and environmental protection when accidental spills are treated.

Bank up soil or sand around spill to prevent it from flowing out to environment.

Scoop up spill with tool such as shovel, and place in closable containers.

Use inert absorbent (e.g. sand or vermiculite) to complete pick-up.

Use vacuum truck if spill is large.

Wash spill site with soap and plenty of water after material pick-up is complete.

6.4 Reference to other sections

Section 8 and 13

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Wear personal protective equipment. Refer to Section 8 for personal protective equipment.

Keep out of reach of children.

Do not breathe mist or vapour.

Avoid contact with skin, eyes and clothing.

Keep away from all sources of ignition.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

Store in a cool, dry, well-ventilated place.

Keep away from direct sunlight, oxidizing agents, foods, drink and animal feedingstuffs.

7.3 Specific end use

Insecticide for agriculture use

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters : TLV/ACGIH not listed

8.2 Exposure controls : It is desirable to use general and/or local exhaust ventilation to control atmosphere in work area. Provide safety showers and eyewashes.

8.2.1 Appropriate engineering controls

Use general and/or local exhaust ventilation to control vapor/mist.

Provide safety showers and eyewashes.

8.2.2 Individual protection measures, such as personal protective equipment

(a) Eye protection : Use safety goggles.

(b) Skin protection : Wear suitable working wear, gloves and boots.

Hand protection : Protective gloves against chemicals and micro-organisms. Materials include: Nitrile, e.g. rubber or polyvinyl chloride, neoprene. Avoid gloves made of Polyvinyl alcohol (PVA).

(c) Respiratory protection: Wear suitable respirator for organic vapor.

(d) Thermal hazards : None

8.2.3 Environmental exposure controls :

It is desirable to use general and/or local exhaust ventilation to control atmosphere in work area.

Provide safety showers and eyewashes.

Prevent from entering into drains, ditches or rivers.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance Off-white to cream liquid

Odour Slightly musty

Odour threshold Not available

pH 5.91(1% aqueous solution)

Melting Point/freezing point -10~0°C (This product froze after storage at -10°C for 3 days.)

Initial boiling point and boiling range 100 °C

Flash Point No flash point until 220°C

Evaporation Rate (Butyl Acetate=1) Not available

Flammability (solid, gas) Not applicable

Upper/lower flammability limits or explosive limits

Not available

Vapor Pressure 4.0×10^{-6} Pa at 20°C ¹⁾(as active ingredient)

Vapor Density (air=1) Not applicable

Relative density (H₂O=1) 1.067 g/cm³

Solubility in water disperses

Partition Coefficient

n-Octanol/water $\log P_{o/w} = 4.25$ at 25°C (as active ingredient)

Auto-Ignition temperature 456°C

Decomposition temperature Not available

Viscosity 388 cps

Explosive properties Not explosive

Oxidising properties Not oxidising

9.2 Other information

Surface Tension 36.8 ± 0.5 mN/M

Particle Size Distribution Not applicable

10. STABILITY AND REACTIVITY

10.1 Reactivity

The specific test data of the reactivity hazards is not available.

10.2 Chemical stability

Stable under normal storage and handling conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Conditions to avoid

Extremes of temperature

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Thermal decomposition or combustion may produce toxic and irritant gas or fume such as nitrogen oxides, carbon dioxide, carbon monoxide, and isobutylene.

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

(a) acute toxicity:

Oral	LD ₅₀ (rat):	> 5000 mg/kg
Dermal	LD ₅₀ (rat):	> 5000 mg/kg
Inhalation	LC ₅₀ (rat):	> 2.7 mg/L (4hr)(maximum practicable concentration)

(b) skin corrosion/irritation:

Dermal (rabbit): Not irritant

(c) serious eye damage/irritation:

Eyes (rabbit): Not irritant.

(d) respiratory or skin sensitization:

Dermal (guinea pig): Negative

Respiratory: Not available

(e) germ cell mutagenicity:

For the Product Not available

Active ingredient

Ames test: Negative

Chromosomal aberration test: Negative

In-vitro genetic toxicity studies were negative.

Animal genetic toxicity studies were negative.

(f) carcinogenicity

For the Product Not available

Active ingredient

Negative (rat)

Negative (mouse)

(g) reproductive toxicity

Reproductive toxicity

For the Product Not available

Active ingredient Negative (rat)

Teratogenicity

For the product Not available

Active ingredient

Negative (rat)

Negative (rabbit)

(h)STOT-single exposure:

For the Product Not available

Active ingredient Not available

(i)STOT-repeated exposure:

For the Product Not available

Active ingredient This classification was regarded to be conclusive but not sufficient for classification according to Annex VI. Table 3.1 of Regulation (EC) No 1272/2008.

Chronic Toxicity

For the product Not available

Active ingredient

NOAEL(rat) : 5 mg/kg/day(male), 6 mg/kg/day (female) (2years)

NOAEL(mouse) : 8 mg/kg/day(male), 9 mg/kg/day (female) (1.5 years)

(j)aspiration hazard: Not applicable

(k)Others: Not available

12. ECOLOGICAL INFORMATION

12.1 Toxicity :

For the product

Acute Toxicity for fish (Rainbow trout): LC₅₀: > 100 mg/L (96 hr)

Acute Toxicity for Daphnia (Daphnia magna): EC₅₀: >100 mg/L (48 hr)

Chronic Toxicity for Daphnia (Daphnia magna): NOEC: 0.032 mg/L (21 days)

Acute Toxicity for Algae (*Pseudokirchneriella Subcapitata*): ErC₅₀: > 95 mg / L (72 hr)

Avian Toxicity

For the product Not available

Active ingredient

Dietary toxicity: LC₅₀ > 5000 ppm (Mallard duck, Bobwhite quail)

Acute toxicity: LD₅₀ > 2150 mg/kg (Bobwhite quail)

Additional Information

For the product Not available

Active ingredient

Earthworm: LC₅₀ > 1000 mg/kg (14 days)

Bees: LD₅₀ > 234 µg/bee

12.2 Persistence and degradability

For the Product Not available

Active ingredient

Not readily biodegradable

12.3 Bioaccumulative potential

For the Product Not available

Active ingredient

Bioconcentration potential is low.

BCF(Bluegill sunfish): 42-70

12.4 Mobility in soil

Partition coefficient, soil organic carbon/water (Koc): For the Product Not available

Active ingredient 572 mL/g

12.5 Results of PBT and vPvB assessment: This product does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex X III.

12.6 Other adverse effects : Not available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

- 1) Waste disposal according to 91/689/EEC in the corresponding versions (hazardous waste).
 - 2) Consider classifications (European waste catalogue) 02 01 or 07 04.
 - 3) Consult the appropriate local authorities about special requirement.
 - 4) Dispose of contents/container in accordance with local/national/international regulations.
-

14. TRANSPORT INFORMATION

14.1 IMDG

UN No. 3082

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Tebufenozide mixture)

Hazard Class 9

Packing Group III

Marin pollutant Applicable

14.2 RID/ ADR

UN No. 3082

Name and description ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Tebufenozide mixture)

Class 9

Packing Group III

Hazard Identification No. 90

Environmentally hazardous Applicable

14.3 ICAO/IATA-DGR

UN No. 3082

Proper shipping name Environmentally hazardous substance, liquid, n.o.s.(Tebufenozide mixture)

Hazard Class 9

Packing Group III

Environmentally hazardous Applicable

14.4 Special precautions for use

None

15. REGULATORY INFORMATION

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

EU regulatory information

The product is regulated under the EU Directive(s) or Regulation(s) on plant protection products since it is one of plant protection products.

National regulatory information

Water Hazard Class (Germany): WGK 2

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

16. OTHER INFORMATION

16.1 Added, deleted or revised information

16.1.1 This safety data sheet is revised in accordance with Regulation (EC) No 1907/2006.

16.1.2 Added, deleted or revised information

Section 3, 6, 7, 8, 14: Minor amendments were done.

16.2 List of hazard statements contained in Section 2 to 16 of this document (for information only)

H302 Harmful if swallowed

H315 Causes skin irritation

H318 Causes serious eye damage

H319 Causes serious eye irritation

H410 Very toxic to aquatic life with long lasting effects

H411 Toxic to aquatic life with long lasting effects

EUH208 Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction.

EUH401 To avoid risks to human health and the environment, comply with the instructions for use

16.3 Reference

1) Budavari, S., (Ed), The Merck Index Ver.12:2
