

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Substance
Name	: Ketjenflex 8
Chemical name	: N-ethyl-o (or p)-toluenesulphonamide
EC-No.	: 232-465-2
CAS-No.	: 8047-99-2
Other means of identification	: CAS-No.: 1077-56-1 (main component)

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

1.2.1. Relevant identified uses

Main use category	: Industrial uses, Professional use, Consumer use, Intermediate
Use of the substance/mixture	: See annex for more detailed information

1.2.2. Uses advised against

Restrictions on use	: No information available
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1.3. Details of the supplier of the safety data sheet

Supplier

Axcentive SARL
 Chemin de Champouse
 13320 Bouc Bel Air - France
 T +33 442 694 090 - F +33 442 694 099
info@axcentive.com

Supplier

Axcentive Asia Pte Ltd
 13 Lorong 8 Toa Payoh
 #07-01 Braddell Tech Park
 319261 Singapore
 T +65 6258 6338 - F +65 6258 6901
info@axcentive.com

1.4. Emergency telephone number

Emergency number	: GLOBAL INCIDENT RESPONSE HOTLINE (ACCESS CODE: 333881): Europe: +44-2035147487, North-America: 1.866.519.4752, South-America: 1.760.476.3961, Asia Pacific: +86-4001203572, Middle East/Africa: 1-760-476-3959, Australia: +61-280363166, New Zealand: +64 800 451719
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Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Health Service (NHS)		111 999 (in life-threatening emergencies)	
Wales	National Health Service (NHS)		0845 46 47	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412
 Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Harmful to aquatic life with long lasting effects.

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2.2. Label elements

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

Signal word (CLP) : -
Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP) : P273 - Avoid release to the environment.
P501 - Dispose of contents/container to an approved waste disposal plant.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

Other information : UFI: Not required, Nano material: Not required.

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
N-ethyl-o (or p)-toluenesulphonamide	(CAS-No.) 8047-99-2 (EC-No.) 232-465-2 (REACH-no) 01-2120791115-55	100	Aquatic Chronic 3, H412

Full text of H- and EUH-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : No hazards which require special first aid measures.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms occur.
First-aid measures after skin contact : Wash skin with plenty of water and soap. Remove contaminated clothing and shoes. Get medical attention immediately if symptoms occur.
First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Get medical attention immediately if symptoms occur.
First-aid measures after ingestion : Rinse mouth. Get medical attention immediately if symptoms occur.

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

Symptoms/effects : No acute and delayed symptoms and effects are observed.

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 : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

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5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released. Nitrogen oxides. Sulphur oxides.

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. Avoid contact with skin, eyes and clothing.

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".

6.2. Environmental precautions

Avoid release to the environment. Avoid sub-soil penetration. Prevent liquid from entering sewers, watercourses, underground or low areas. Stop leak if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel). Shovel or sweep up and put in a closed container for disposal.

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

6.4. Reference to other sections

See sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Avoid breathing vapours, mist. Ensure good ventilation of the work station. Prevent entry to sewers and public waters. Avoid release to the environment.

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

Storage conditions : Store in original container. Keep container tightly closed in a cool, well-ventilated place.

Heat and ignition sources : Keep away from heat, sparks and flames.

7.3. Specific end use(s)

See annex for more detailed information.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

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8.1.2. Recommended monitoring procedures

Monitoring methods	
Monitoring methods	Refer to European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) or equivalent national standard(s). Refer to European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) or equivalent national standard(s). Refer to European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) or equivalent national standard(s).

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

N-ethyl-o (or p)-toluenesulphonamide (8047-99-2)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	13.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	19.1 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	1.6 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	5.65 mg/m ³
Long-term - systemic effects, dermal	8.1 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	78 µg/l
PNEC aqua (marine water)	7.8 µg/l
PNEC aqua (intermittent, freshwater)	780 µg/l
PNEC aqua (intermittent, marine water)	78 µg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	1.69 mg/kg dwt
PNEC sediment (marine water)	0.169 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.292 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	6.44 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure adequate ventilation, especially in confined areas.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):

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8.2.2.1. Eye and face protection

Eye protection:			
Type	Use	Characteristics	Standard
Tightly fitting safety goggles	Splashes, Aerosols		EN 166

8.2.2.2. Skin protection

Skin and body protection:					
Wear suitable protective clothing					
Type					Standard
Long sleeved protective clothing					EN 13034
Hand protection:					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Protective gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0.35		EN 374
Protective gloves	Polyvinylchloride (PVC), Butyl rubber, Neoprene rubber (HNBR)	6 (> 480 minutes)	0.5		EN 374
Protective gloves	Viton®	6 (> 480 minutes)	0.4		EN 374

8.2.2.3. Respiratory protection

Respiratory protection:			
In case of insufficient ventilation, wear suitable respiratory equipment			
Device	Filter type	Condition	Standard
Half-face mask	Type P2, Type FFP2		EN 140, EN 143
Full face mask	Type P2, Type FFP2		EN 136, EN 143

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Other exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Light yellow
Appearance	: Viscous
Odour	: mild
Odour threshold	: Not available

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Melting point	: -46 °C
Boiling point	: 226.1 °C
Flammability	: Non flammable.
Explosive properties	: Not explosive
Explosive limits	: Not available
Flash point	: 202 °C (closed cup)
Auto-ignition temperature	: 507 °C
Decomposition temperature	: Not available
pH	: Neutral
Viscosity, kinematic	: Not available
Viscosity, dynamic	: 280 mPa.s
Solubility	: Soluble in organic solvents (Exception: Petroleum Hydrocarbons) Water: 470 mg/l (@ 20°C)
Partition coefficient n-octanol/water (Log Kow)	: 1.8
Vapour pressure	: 0.015 Pa (@ 25°C)
Density	: Not available
Relative density	: 1.1885 (@ 20°C)
Relative vapour density at 20°C	: Not available
Particle size	: Liquid product
Particle size distribution	: Liquid product
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Oxidising properties : Non oxidizing

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerisation: Will not occur.

10.4. Conditions to avoid

Keep away from heat, sparks and flames.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

Toxic fumes may be released. Nitrogen oxides. Sulphur oxides.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

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N-ethyl-o (or p)-toluenesulphonamide (8047-99-2)	
LD50 oral rat	> 5800 mg/kg (OECD 401 method)
LD50 dermal rabbit	> 7940 mg/kg bw/day (OECD 402 method)
Skin corrosion/irritation	: Not irritating: (OECD 404 method) pH: Neutral
Serious eye damage/irritation	: Not irritating. (OECD 405 method) pH: Neutral
Respiratory or skin sensitisation	: No known effects from this product. (OECD 429 method)
Germ cell mutagenicity	: Not known to cause heritable genetic damage. In vitro, AMES test : Not mutagenic (OECD 471 method) . Micronucleus test: Negative (OECD 474 method)
Carcinogenicity	: Contains no ingredient listed as a carcinogen
Reproductive toxicity	: Not known to cause birth defects or have a deleterious effect on a developing fetus. Not known to adversely affect reproductive functions and organs
Additional information	: NOAEL, oral : 1000 ppm (OECD 416 method)
STOT-single exposure	: Not classified
STOT-repeated exposure	: Based on available data, the classification criteria are not met. NOAEL, Oral : 100 mg/kg bw/d (OECD 408 method)
Aspiration hazard	: Not classified

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : Contains no substances identified as having endocrine disrupting properties

11.2.2 Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

N-ethyl-o (or p)-toluenesulphonamide (8047-99-2)	
LC50 fish 1	130 mg/l <i>Lepomis macrochirus</i> (Bluegill)
EC50 Daphnia 1	> 1000 mg/l
EC50 72h - Algae [1]	78 mg/l Test organisms (species): <i>Pseudokirchneriella subcapitata</i> (previous names: <i>Raphidocelis subcapitata</i> , <i>Selenastrum capricornutum</i>)

12.2. Persistence and degradability

Ketjenflex 8 (8047-99-2)

Persistence and degradability : Not readily biodegradable.

12.3. Bioaccumulative potential

Ketjenflex 8 (8047-99-2)

Partition coefficient n-octanol/water (Log Kow) : 1.8

Bioaccumulative potential : No bioaccumulation.

N-ethyl-o (or p)-toluenesulphonamide

Bioaccumulative potential : No bioaccumulation.

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12.4. Mobility in soil

N-ethyl-o (or p)-toluenesulphonamide (8047-99-2)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	180.6 (@ 20°C)
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12.5. Results of PBT and vPvB assessment

Ketjenflex 8 (8047-99-2)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : Contains no substances identified as having endocrine disrupting properties

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of in accordance with relevant local regulations. Avoid release to the environment.
Product/Packaging disposal recommendations : Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated	Not regulated	Not regulated	UN 9006	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, N2)	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	9	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not applicable	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Dangerous for the environment : No	Not regulated
No supplementary information available				

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14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

No data available

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

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

Not listed on REACH Annex XVII

Not listed on the REACH Candidate List

Not listed on REACH Annex XIV (Authorisation List)

Not listed on the PIC list (Regulation EU 649/2012)

Not listed on the POP list (Regulation EU 2019/1021)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

A chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Fire extinguishers. Full Layout. Handling and storage. Ecological information. Personal protection equipment. SDS EU format according to COMMISSION REGULATION (EU) 2020/878.

Training advice : Workers must be trained in the proper use and handling of this product as required under applicable regulations.

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
LC50	Median lethal concentration
LD50	Median lethal dose
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration

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OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STEL	Short-term exposure limit
vPvB	Very Persistent and Very Bioaccumulative
Full text of H- and EUH-statements:	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
H412	Harmful to aquatic life with long lasting effects.

Safety Data Sheet applicable for regions : IE - Ireland;GB - United Kingdom

SDS EU (REACH Annex II) - RHDHV

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.