ENASPOL

SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878 as amended

Flavol KAPO

Creation date	21st April 2021	Version	5.0	13 rue Louis Blériot 77290 COMPANS
Revision date	15th December 2025			

INTERCHIMIE

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

1.1. Product identifier — Flavol KAPO

Substance / mixture	mixture
Number	40280
UFI	27JK-Y3SM-F00W-JDXK

Other mixture names

Amides, coco, N-[3-(dimethylamino)propyl], N-oxides; C12-C18 Amido Amine Oxides; Cocamidopropylamine Oxide

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

Mixture's intended use

Basic surfactant in the production of detergents and personal care products. Ingredient in the production of detergents, industrial auxiliary.

Main intended use

PC-UNC Chemical products - uncategorised

Mixture uses advised against

The product should not be used in ways other than those referred in Section 1.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Name or trade name	Enaspol a. s.
Address	Velvěty 79, Rtyně nad Bílinou, 415 01 Czech Republic
Identification number (CRN)	25006339
VAT number	CZ25006339
Phone	+420 703 146 416
Email	enaspol@enaspol.com
Web address	http://www.enaspol.cz

Competent person responsible for the safety data sheet

Name	Táňa Polmová
Email	Tana.Polmova@Enaspol.com

1.4. Emergency telephone number

European emergency number: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Acute Tox. 4, H302
Skin Irrit. 2, H315
Eye Dam. 1, H318
Aquatic Acute 1, H400
Aquatic Chronic 2, H411

Most serious adverse effects on human health and the environment

Harmful if swallowed. Causes skin irritation. Causes serious eye damage. Highly toxic for aquatic life. Toxic to aquatic life with long-lasting effects.

2.2. Label elements

Hazard pictogram

Signal word

Danger

Hazardous substances

3-C12-18-(even numbered)-alkylamido-N,N-dimethylpropan-1-amino oxide

Hazard statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P264	Wash hands and exposed parts of the body thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a doctor.

2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended. Does not contain any PMT or vPvM components.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 1471314-81-4 EC: 939-581-9 Registration number: 01-2119978229-22-0010	3-C12-18-(even numbered)-alkylamido-N,N-dimethylpropan-1-amino oxide	29-31	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	1

Notes

1 *Substance of unknown or variable composition, complex reaction products or biological materials - UVCB.*

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

If swallowed

DO NOT INDUCE VOMITING - even the inducted vomiting can cause complications as in case of detergents and other foaming substances.

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

If inhaled

Mucous membranes may be irritated.

If on skin

Causes skin irritation.

If in eyes

Causes serious eye damage.

If swallowed

Irritation, nausea.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Prevent contact with skin and eyes.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent contact with skin and eyes. Wash hands and exposed parts of the body thoroughly after handling. Do not eat, drink or smoke when using this product. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose.

Content	Packaging type	Material of package
50 kg	barrel / drum	
200 kg	barrel / drum	
1000 kg	IBC (intermediate bulk container)	

Storage class	12 - Non-combustible liquids that cannot be assigned to any of the above storage classes
Storage temperature	min 10 °C, max 40 °C

7.3. Specific end use(s)

Basic surfactant in the production of detergents and personal care products. Ingredient in the production of detergents, industrial auxiliary.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains no substances for which occupational exposure limits are set.

DNEL

3-C12-18-(even numbered)-alkylamido-N,N-dimethylpropan-1-amino oxide			
Workers / consumers	Route of exposure	Value	Effect
Workers	Inhalation	3.52 mg/m³	Chronic effects systemic
Workers	Dermal	5 mg/kg bw/day	Chronic effects systemic
Consumers	Inhalation	0.87 mg/m³	Chronic effects systemic
Consumers	Dermal	2.5 mg/kg bw/day	Chronic effects systemic
Consumers	Oral	0.25 mg/kg bw/day	Chronic effects systemic

PNEC

3-C12-18-(even numbered)-alkylamido-N,N-dimethylpropan-1-amino oxide	
Route of exposure	Value
Drinking water	30.3 µg/l
Water (intermittent release)	6.8 µg/l
Marine water	3.04 µg/l
Microorganisms in sewage treatment	9.7 mg/l
Freshwater sediment	0.214 mg/kg
Sea sediments	0.021 mg/kg
Soil (agricultural)	0.025 mg/kg of dry substance of soil

8.2. Exposure controls

Take off contaminated clothing and wash before reuse. Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

tightly sealed protective goggles or protective shield (according to EN 166)

Skin protection

Use chemical-resistant, impervious protective gloves (according to EN 374-1):
permanent contact:
material – nitrile rubber
glove thickness – 0.11 mm
permeation time > 480 min
permeation class – 6
splash:
material – nitrile rubber
glove thickness – 0.11 mm
permeation time > 480 min
permeation class – 6
Gloves used must comply with the specifications set up in Directive 89/686/EEC and related norm EN 374-1.
Additional warning:
The data above are based on our own tests, literature data or they were analogically derived from similar substances. With regards to various conditions (eg. temperature) the actual durability life of gloves resistant to chemicals may be substantially shorter than the permeation time set up in the EN 374-1 standard. Observe recommendations of the particular manufacturer of the gloves when choosing appropriate thickness, material and permeability.

Respiratory protection

Respiratory protection is required if fumes/aerosols are formed or in case of inadequate ventilation.
Recommended type of filter: Filter A (according to EN 14387 + A1) against organic gases and vapours of organic substances with boiling point > 65°C. Appropriate room ventilation is also essential.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless, colourless to yellowish
Odour	negligible
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	>100 °C
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	>100 °C
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	6.5-8.5 (10% solution at 20 °C)
Kinematic viscosity	data not available
Solubility in water	soluble
Solubility in fats	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	
Density	1.002 g/cm³ at 20 °C
Relative vapour density	data not available
Particle characteristics	data not available
Form	liquid

9.2. Other information

Evaporation rate	data not available
Oxidising properties	The product has no oxidizing properties.
Explosive properties	The product does not have explosive properties.

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

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

No toxicological data is available for the mixture.

Acute toxicity

Harmful if swallowed.

Flavol KAPO							
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination
Oral	ATE		1613 mg/kg				Calculation of value

3-C12-18-(even numbered)-alkylamido-N,N-dimethylpropan-1-amino oxide							
Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination
Oral	LD_{50}	OECD 423	500-1000 mg/kg bw		Rat (Rattus norvegicus)		
Dermal	LD_{50}	OECD 402	>2174 mg/kg bw		Rat (Rattus norvegicus)		

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

Toxicity for specific target organ - single exposure
Based on the available data, the criteria for classification of the mixture are not met.

Toxicity for specific target organ - repeated exposure
Based on the available data, the criteria for classification of the mixture are not met.

Repeated dose toxicity

3-C12-18-(even numbered)-alkylamido-N,N-dimethylpropan-1-amino oxide							
Route of exposure	Parameter	Result	Method	Value	Exposure time	Species	Sex
Oral	NOAEL		OECD 408	50 mg/kg bw/day	90 days	Rat (Rattus norvegicus)	

Aspiration hazard
Based on the available data, the criteria for classification of the mixture are not met.

11.2. Information on other hazards

Endocrine disrupting properties
Based on the available data, the criteria for classification of the mixture are not met. Does not contain any components that may cause endocrine disruption for humans.

Other information
not available

SECTION 12: Ecological information

12.1. Toxicity

Highly toxic for aquatic life. Toxic to aquatic life with long-lasting effects.

Acute toxicity

3-C12-18-(even numbered)-alkylamido-N,N-dimethylpropan-1-amino oxide					
Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}	OECD 203	0.68 mg/l	96 hours	Fish (Oncorhynchus mykiss)	
LC_{50}	OECD 202	19.9 mg/l	48 hours	Daphnia (Daphnia magna)	
EC_{50}	OECD 201	0.705 mg/l	72 hours	Algae (Pseudokirchneriella subcapitata)	

Chronic toxicity

3-C12-18-(even numbered)-alkylamido-N,N-dimethylpropan-1-amino oxide					
Parameter	Method	Value	Exposure time	Species	Environment
NOEC	EPA OPPTS 850.1500	0.42 mg/l	302 days	Fish (Pimephales promelas)	
NOEC	OECD 211	0.7 mg/l	21 days	Daphnia (Daphnia magna)	

12.2. Persistence and degradability

The following data are available. The mixture is biodegradable.

Biodegradability

Flavol KAPO							
Parameter	Method	Value	Exposure time	Environment	Value determination	Result	Source
						Easily biodegradable	

3-C12-18-(even numbered)-alkylamido-N,N-dimethylpropan-1-amino oxide							
Parameter	Method	Value	Exposure time	Environment	Value determination	Result	Source
	OECD 301D	75.7 %			Expert opinion	Easily biodegradable	EMPLA T 339/2021

12.3. Bioaccumulative potential

Insignificant.

12.4. Mobility in soil

Based on the available data, the criteria for classification of the mixture are not met. Does not contain any PMT or vPvM components.

12.5. Results of PBT and vPvB assessment

Based on the available data, the criteria for classification of the mixture are not met. Does not contain any PBT or vPvB components.

12.6. Endocrine disrupting properties

Based on the available data, the criteria for classification of the mixture are not met. Does not contain any components that may cause endocrine disruption in the environment.

12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

16 03 05* organic wastes containing hazardous substances

Packaging waste type code

15 01 10* packaging containing residues of or contaminated by hazardous substances

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

SECTION 14: Transport information

14.1. UN number or ID number

UN 3082

14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (3-C12-18-(even numbered)-alkylamido-N,N-dimethylpropan-1-amino oxide)

14.3. Transport hazard class(es)

9 Miscellaneous dangerous substances and articles

14.4. Packing group

III

14.5. Environmental hazards

Highly toxic for aquatic life. Toxic to aquatic life with long-lasting effects.

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

Additional information

Hazard identification No.	**90**
UN number	**3082**
Classification code	M6
Safety signs	9+hazardous for the environment

Tunnel restriction code	(-)

Air transport - ICAO/IATA

Packaging instructions passenger	964
Cargo packaging instructions	964

Marine transport - IMDG

EmS (emergency plan)	F-A, S-F

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents, as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Guidelines for safe handling used in the safety data sheet

P264	Wash hands and exposed parts of the body thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a doctor.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

Acute Tox.	Acute toxicity
ADR	Agreement concerning the international carriage of dangerous goods by road
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
ATE	Acute toxicity estimate
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EC_{50}	Concentration of a substance when it is affected 50 % of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency Response Procedures for Ships Carrying Dangerous Goods
EU	European Union
EuPCS	European Product Categorisation System
Eye Dam.	Serious eye damage
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC_{50}	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD_{50}	Lethal dose of a substance in which it can be expected death of 50% of the population
log Kow	Octanol-water partition coefficient
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
OEL	Occupational Exposure Limits
PBT	Persistent, bioaccumulative and toxic
PMT	Persistent, mobile and toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulation concerning the International Carriage of Dangerous Goods by Rail
Skin Irrit.	Skin irritation
UN number	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very persistent and very bioaccumulative
vPvM	Very persistent and very mobile

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

The version 5.0 replaces the SDS version from Wednesday, 14 July 2021. Changes were made in sections 1, 2, 3, 8, 11, 12, 13, 15 and 16.

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.