

# SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

## Astasol AN9100MHIC

Creation date 18. June 2019  
Revision date Version 1.0

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

- 1.1. Product identifier**  
Substance / mixture Astasol AN9100MHIC  
Number mixture  
AN9100MH(IC)
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**  
Mixture's intended use For professional use only.
- The use descriptors**  
SU 24 Scientific research and development  
PC 21 Laboratory chemicals
- Mixture uses advised against not available
- 1.3. Details of the supplier of the safety data sheet**  
**Manufacturer**  
Name or trade name Analytika, spol. s r.o.  
Address Ke Klíčovu 816/2a, Praha 9 - Vysočany, 190 00  
Czech Republic  
Identification number (CRN) 14891883  
VAT Reg No CZ14891883  
Phone +420 286 589 616  
E-mail sales@analytika.net  
Web address www.analytika.net
- Competent person responsible for the safety data sheet**  
Name Analytika, spol. s r.o.  
E-mail sales@analytika.net
- 1.4. Emergency telephone number**  
National Health Service (NHS) 111  
National poisoning information centre Scotland, NHS 24: 111

### SECTION 2: Hazards identification

- 2.1. Substance or mixture classification**  
**Classification of the mixture in accordance with Regulation (EC) No 1272/2008**  
The mixture is not classified as dangerous according to Regulation (EC) No 1272/2008.  
  
Full text of all classifications and hazard statements is given in the section 16.
- Most serious adverse physico-chemical effects**  
Unknown.
- Most serious adverse effects on human health and the environment**  
Unknown.
- 2.2. Label elements**  
  
**Hazardous substances**  
sodium fluoride  
Potassium chloride  
potassium bromide
- 2.3. Other hazards**  
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.

# SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

## Astasol AN9100MHIC

Creation date 18. June 2019  
Revision date Version 1.0

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Chemical characterization

Mixture of substances and non-hazardous additives specified below.

**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.
Index: 009-004-00-7 CAS: 7681-49-4 EC: 231-667-8	sodium fluoride	0,22	Acute Tox. 3, H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319 EUH 032	
CAS: 7447-40-7 EC: 231-211-8	Potassium chloride	0,21		
CAS: 7758-02-3 EC: 231-830-3	potassium bromide	0,149	Eye Irrit. 2, H319	

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 inhaled

Terminate the exposure immediately; move the affected person to fresh air.

##### If on skin

Remove contaminated clothes.

##### 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.

##### If swallowed

Rinse out the mouth with clean water. In the event of issues, find medical help.

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

##### If inhaled

Not expected.

##### If on skin

Not expected.

##### If in eyes

Not expected.

##### If swallowed

Not expected.

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

Symptomatic treatment.

##### More information

Other information is not available.

# SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

## Astasol AN9100MHIC

Creation date	18. June 2019	Version	1.0
Revision date			

### 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

Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. 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

The mixture is non-flammable. Provide sufficient ventilation. Use gloves in case of prolonged contact. Follow the instructions in the Sections 7 and 8.

#### 6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

#### 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. Dispose of the collected material according to the instructions in the section 13. Upon an escape of large quantities of the product, inform the Fire Department and the Environmental Department of the Municipal Authority with the extended scope of competencies. 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

Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

#### 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.

Storage class

12 - Other non-combustible liquids

Material of package

HDPE (2), High-density (linear) polyethylene (Plastics)



HDPE

#### 7.3. Specific end use(s)

not available

# SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

## Astasol AN9100MHIC

Creation date	18. June 2019	Version	1.0
Revision date			

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

none

#### 8.2. Exposure controls

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. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. 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

Protective goggles or face shield (based on the nature of the work performed).

##### Skin protection

When handling in long-term or repeatedly, use protective gloves.

##### Respiratory protection

It is not needed.

##### Thermal hazard

Not available.

##### Environmental exposure controls

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

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

##### Appearance

Physical state	liquid at 20°C
color	data not available

Odour	data not available
-------	--------------------

Odour threshold	data not available
-----------------	--------------------

pH	data not available
----	--------------------

Melting point/freezing point	data not available
------------------------------	--------------------

Initial boiling point and boiling range	data not available
---	--------------------

Flash point	data not available
-------------	--------------------

Evaporation rate	data not available
------------------	--------------------

Flammability (solid, gas)	data not available
---------------------------	--------------------

Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	data not available

Vapour pressure	data not available
-----------------	--------------------

Vapour density	data not available
----------------	--------------------

Relative density	data not available
------------------	--------------------

Solubility(ies)	
solubility in water	soluble
solubility in fats	data not available

Partition coefficient: n-octanol/water	data not available
--	--------------------

Auto-ignition temperature	data not available
---------------------------	--------------------

Decomposition temperature	data not available
---------------------------	--------------------

Viscosity	data not available
-----------	--------------------

Explosive properties	data not available
----------------------	--------------------

# SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

## Astasol AN9100MHIC

Creation date	18. June 2019		
Revision date		Version	1.0
Oxidising properties	data not available		
data not available			
9.2. Other information			
Density	data not available		
ignition temperature	data not available		
none			

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The mixture is non-flammable.

#### 10.2. Chemical stability

The product is stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

The product is stable under normal conditions.

#### 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. Thereby a dangerous exothermic reaction will be prevented.

#### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous products are formed at high temperature and in fire, such as carbon monoxide and carbon dioxide, heavy smoke and hydrogen chloride.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

No toxicological data is available for the mixture.

##### Acute toxicity

Based on available data the classification criteria are not met.

potassium bromide

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex
Oral	LD <sub>50</sub>	OECD 401	2000 mg/kg		Rat	F/M
	LC <sub>50</sub>		30 mg/l	96 hour	Pimephales promelas	

##### Skin corrosion/irritation

Based on available data the classification criteria are not met.

potassium bromide

Route of exposure	Result	Method	Time of exposure	Species
	Not irritating	OECD 404	4 hour	Rabbit

# SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

## Astasol AN9100MHIC

Creation date 18. June 2019  
Revision date Version 1.0

### Serious eye damage/irritation

Based on available data the classification criteria are not met.

potassium bromide

Route of exposure	Result	Method	Time of exposure	Species
Eye	Irritating	OECD 405		Rabbit

### Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

### Germ cell mutagenicity

Based on available data the classification criteria are not met.

potassium bromide

Result	Time of exposure	Specific target organ	Species	Sex	Source
Negative			Salmonella typhimurium		test podle Ames

### Carcinogenicity

Based on available data the classification criteria are not met.

### Reproductive toxicity

Based on available data the classification criteria are not met.

### Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

### Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

### Repeated dose toxicity

potassium bromide

Route of exposure	Parameter	Result	Value	Time of exposure	Species	Sex
Oral	NOAEL		16.5 mg/kg		Rat	M

### Aspiration hazard

Based on available data the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Acute toxicity

Data for the mixture are not available.

### 12.2. Persistence and degradability

# SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

## Astasol AN9100MHIC

Creation date	18. June 2019	Version	1.0
Revision date			

Data not available.

### 12.3. Bioaccumulative potential

Not available.

### 12.4. Mobility in soil

Not available.

### 12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

### 12.6. 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. Proceed in accordance with valid regulations on waste disposal. 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.

## SECTION 14: Transport information

### 14.1. UN number

Not subject to ADR

### 14.2. UN proper shipping name

not available

### 14.3. Transport hazard class(es)

not available

### 14.4. Packing group

not available

### 14.5. Environmental hazards

not available

### 14.6. Special precautions for user

Reference in the Sections 4 to 8.

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not available

# SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

## Astasol AN9100MHIC

Creation date	18. June 2019	Version	1.0
Revision date			

### 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 of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

#### 15.2. Chemical safety assessment

not available

### SECTION 16: Other information

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

H301	Toxic if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

#### A list of additional standard phrases used in the safety data sheet

EUH 032	Contact with acids liberates very toxic gas.
---------	--

#### 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

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EC	Identification code for each substance listed in EINECS
EC <sub>50</sub>	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC <sub>50</sub>	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry

# SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

## Astasol AN9100MHIC

Creation date	18. June 2019	Version	1.0
Revision date			

LC <sub>50</sub>	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD <sub>50</sub>	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log K <sub>ow</sub>	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	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

Acute Tox.	Acute toxicity
Eye Irrit.	Eye irritation
Skin Irrit.	Skin irritation

### 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. First aid principles after the exposure to the chemicals (Zásady pro poskytování první pomoci při expozici chemickým látkám, doc. MUDr. Daniela Pelclová, CSc., MUDr. Alexandr Fuchs, CSc., MUDr. Miroslava Hornychová, CSc., MUDr. Zdeňka Trávníčková, CSc., Jiřina Fridrichovská, prom. chem.). Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

### More information

Classification procedure - calculation method.

## Statement

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as  
amended



## Astasol AN9100MHIC

Creation date 18. June 2019

Revision date Version 1.0

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.