

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

1.1. Product Identifier

Product code 51644
Product name AdapT 402

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

Recommended use Treatment :
 gas

Uses advised against -

1.3. Details of the supplier of the safety data sheet

Manufacturer

Taminco BVBA
 A subsidiary of Eastman Chemical Company
 Panterschipstraat 207
 9000 Ghent
 Belgium
 T: +32 9 254 1411
 F: +32 9 254 1410

For further information, please contact

E-mail address SDS_Chemicals@eastman.com
 MSDS_FCH@taminco.com

1.4. Emergency telephone number

(+32) 9 254 10 36

Emergency telephone - §45 - (EC)1272/2008	
Europe	112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin Corrosion/Irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity (single exposure)	Category 3 - (H335)

2.2. Label Elements

Product Identifier**Signal Word**

Warning

hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Precautionary Statements - EU (§28, 1272/2008)

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P362 - Take off contaminated clothing and wash before re-use

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

2.3. Other Hazards

None known

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical Name	EINECS-No.	CAS-No	Weight %	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number	M-Factor
Alkali salt	Listed	Proprietary	20-50	Skin Irrit 2 (H315) Eye Irrit 2 (H319) STOT SE3 (H335)	no data available	1

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

SECTION 4: First aid measures

4.1. Description of first aid measures**General advice**

If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.

Inhalation

Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Symptoms may be delayed. Immediate medical attention is required.

Skin contact

Immediately flush skin with running water for 30 minutes or until no traces remain. Wash with soap and water. Remove contaminated clothing immediately. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Obtain medical attention.
Ingestion	Never give anything by mouth to an unconscious person. rinse mouth. If conscious, drink plenty of water. Immediate medical attention is required.

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

Symptoms See Section 11: TOXICOLOGICAL INFORMATION

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

Notes to physician Treat symptomatically

SECTION 5: Fire fighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide (CO₂), water spray

Extinguishing media which must not be used for safety reasons

high volume water jet

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Hazardous combustion products carbon oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required. Do not allow run-off from fire-fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid contact with skin, eyes and clothing. wear personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Remove immediately adhering matter.

6.3. Methods and material for containment and cleaning up

Methods for containment

Large spills should be collected mechanically (remove by pumping) for disposal. Keep in suitable, closed containers for disposal.

Methods for cleaning up

Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Use only non-sparking tools.

6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling**Handling**

Wear suitable protective clothing, gloves and eye/face protection. Avoid contact with skin and eyes. Do not smoke. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

Hygiene measures

Regular cleaning of equipment, work area and clothing. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities**Storage**

Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers. Keep container tightly closed.

7.3. Specific end use(s)**Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment**Eye protection****Hand protection**

Tight sealing safety goggles.
rubber gloves. Neoprene gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves. The exact break through time can be obtained from the protective glove producer and this has to be observed. Gloves must be disposed of and replaced before the breakthrough time and when they show signs of degradation.

Skin and body protection

Suitable protective clothing.

Environmental exposure controls No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State	liquid	Colour	Colorless
Odor	odorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	11.6 (10 % solution)	-
Melting point/freezing point	-5 °C	-
Boiling point/range	105 °C	-
Flash point	no data available	-
Evaporation rate	No information available	-
Flammability (solid, gas)		
Flammability Limit in Air		
Upper flammability limit:	-	
Lower flammability limit:	-	
Vapour Pressure Value	no data available	-
Vapor Density	not applicable	-
Specific Gravity	1.3	-
Water solubility	completely soluble	-
Partition coefficient	No information available	-
Autoignition temperature		-
Decomposition temperature	Not applicable	-
Kinematic viscosity		-
Dissociation constant	Not applicable	-
Surface tension	Not applicable	-
Explosive properties	Not explosive	
Oxidising properties	None	
<u>9.2. Other information</u>		
Dynamic viscosity	5-6 mPas @ 20 °C	
Density	1.3 g/cm ³	

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

no data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

acids. copper. Zinc. Aluminum.

10.6. Hazardous decomposition products

No information available. Carbon monoxide.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effectsProduct Information

LD50/oral/rat =	> 2000 mg/kg
LD50/dermal/rabbit =	> 2000 mg/kg
LC50/inhalation/4h/rat =	> 4.96 mg/l
Eye irritation	Irritating to eyes
Skin irritation	Irritating to skin
sensitisation	Did not cause sensitization on laboratory animals
mutagenic effects	Did not show mutagenic effects in animal experiments
Reproductive toxicity	Did not show teratogenic effects in animal experiments
carcinogenic effects	Did not show carcinogenic effects in animal experiments

Human experience

Human experience Irritating to eyes, respiratory system and skin

Section 12: ECOLOGICAL INFORMATION12.1. ToxicityProduct Information

LC50/96h/Rainbow trout =	68 mg/L
LC50/48h/daphnia =	200 mg/L
Toxicity to Algae	No information available
Toxicity to bacteria	No information available

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available

12.4. Mobility in soil

No information available

12.5. Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)

This substance is not considered to be very persistent nor very bioaccumulating (vPvB)

12.6. Other adverse effects

None known based on information supplied

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues / unused products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Improper disposal or reuse of this container may be dangerous and illegal.

Section 14: TRANSPORT INFORMATION

IMDG/IMO

14.1 UN-No	not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	not regulated
14.4 Packing group	not regulated
14.5 Marine pollutant	not applicable
14.6 Special Provisions	Not relevant
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	not applicable

RID

14.1 UN-No	not regulated
14.2 Proper shipping name	not regulated
14.3 Hazard Class	not regulated
14.4 Packing group	not regulated
14.5 Environmental hazard	not applicable
14.6 Special Provisions	Not relevant

ADR

14.1 UN-No	not regulated
14.2 Proper shipping name	not regulated
14.3 Hazard Class	not regulated
14.4 Packing group	not regulated
14.5 Environmental hazard	not applicable
14.6 Special Provisions	Not relevant

ADN

14.1 UN-No	not regulated
14.2 Proper shipping name	not regulated
14.3 Hazard Class	not regulated
14.4 Packing group	not regulated
14.5 Environmental hazard	not applicable
14.6 Special Provisions	Not relevant

ICAO/IATA

14.1 UN-No	not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	not regulated
14.4 Packing group	not regulated
14.5 Environmental hazard	not applicable
14.6 Special Provisions	Not relevant

Section 15: REGULATORY INFORMATION

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

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Not applicable

Section 16: OTHER INFORMATION**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

Legend

SVHC: Substances of Very High Concern for Authorization:

- Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Revision Date 31-07-2015

Reason for revision not applicable.

Training Advice Provide adequate information, instruction and training for operators

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer:

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.

End of Safety Data Sheet