Printing date 02.07.2013 Revision: 14 08 2012 SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifier Sodium acetylide, ca 18% slurry in xylenes Trade name Stock number

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

Identified use:

SU24 Scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG A Johnson Matthey Company Zeppelinstr. 7b 76185 Karlsruhe / Germany Tel: +49 (0) 721 84007 280 Fax: +49 (0) 721 84007 300 Email: tech@alfa.com

www.alfa.com

Informing department: 1.4 Emergency telephone number:

www.arra.com Product safety Tel + +049 (0) 7275 988687-0 Carechem 24: +44 (o) 1235 239 670 (Multi-language emergency number) Poison Information Center Mainz www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240

#### SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS02 flame

H226 Flammable liquid and vapour. Flam. Lig. 3

Water-react. 2 H261 In contact with water releases flammable gases.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.



Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 4 H332 Harmful if inhaled.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

C: Corrosive

R34: Causes burns.

Xn; Harmful

R20/21: Harmful by inhalation and in contact with skin.

F; Highly flammable

Flammable. Reacts violently with water, liberating extremely flammable gases.

Information concerning particular hazards

for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Other hazards that do not result in classification No information known.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Hazard-determining components of

labelling:

**Hazard statements** 

Danger<sup>2</sup>

Xylenes Sodium acetylide

H226 Flammable liquid and vapour.
H261 In contact with water releases flammable gases.
H312 Harmful in contact with skin.

Precautionary statements

The product is classified and labelled according to the CLP regulation. GHS02, GHS05, GHS07

H312 Harmful in contact with skin.
H332 Harmful if inhaled.
H314 Causes severe skin burns and eye damage.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P231+P232 Handle under inert gas. Protect from moisture.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Store locked up.

P405

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

regulations EUH014 Reacts violently with water.

Additional information:

2.3 Other hazards
Results of PBT and vPvB assessment

PRI

Not applicable. Not applicable vPvB:

# SECTION 3: Composition/information on ingredients

3.2 Mixtures

	O.E MIXTUIOS			
Dangerous components:				
	CAS: 1330-20-7 EINECS: 202-422-2	Xylenes	<b>X</b> Xn R20/21; <b>X</b> Xi R38 R10	82,0%
ı			♦ Flam. Lig. 3, H226; ♦ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	
Г	CAS: 1066-26-8	Sodium acetylide	☑ C R34; 6 F R14/15	18,0%
L		·		·
Additional information		ion	None known.	

#### SECTION 4: First aid measures

4.1 Description of first aid measures General information

Instantly remove any clothing soiled by the product.

Safety data sheet according to 1907/2006/EC, Article 31

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After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms

persist. Seek immediate medical advice

Seek medical treatment.

After skin contact Instantly wash with water and soap and rinse thoroughly.

Seek immediate medical advice.
Rinse opened eye for several minutes under running water. Then consult doctor. After eye contact

After swallowing

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available. No further relevant information available

# SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents
For safety reasons unsuitable extinguishing

agents
5.2 Special hazards arising from the

substance or mixture

Water.

Reacts violently with water If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide Sodium oxide

5.3 Advice for firefighters Wear self-contained breathing apparatus. Protective equipment: Wear full protective suit.

#### SECTION 6: Accidental release measures

6.1 Personal precautions, protective

equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

Keep away from ignition sources
Do not allow material to be released to the environment without proper governmental permits. 6.2 Environmental precautions:

Do not allow product to reach sewage system or water bodies. Do not allow to enter the ground/soil.

6.3 Methods and material for containment

and cleaning up:

Keep away from ignition sources. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.

Use neutralizing agent.

Dispose of contaminated material as waste according to item 13. Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

Prevention of secondary hazards: 6.4 Reference to other sections

See Section 13 for information on disposal.

See Section 8 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

# SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handle under dry protective gas. Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace.

Information about protection against

explosions and fires:

Protect against electrostatic charges. Fumes can combine with air to form an explosive mixture.

#### 7.2 Cond Storage 7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and

containers:

Information about storage in one common

storage facility:

No special requirements.

Store away from air. Store away from water. Store away from strong bases.

Further information about storage conditions:

Store under dry inert gas.

This product is moisture sensitive. This product is air sensitive.

Protect from humidity and keep away from water.

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

Store in a locked cabinet or with access restricted to technical experts or their assistants.

No further relevant information available.

7.3 Specific end use(s)

# SECTION 8: Exposure controls/personal protection

Additional information about design of

technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

#### 8.1 Control parameters

## Components with critical values that require monitoring at the workplace:

1330-20-7 Xylenes (82,0%)

AGW (Germany) 440 mg/m³, 100 ppm 2(II);DFG, EU, H 440 mg/m³, 100 ppm H; DFG MAK (TRGS 900) (Germany) 435 mg/m<sup>3</sup>, 100 ppm PEL (USA)

Short-term value: 655 mg/m³, 150 ppm Long-term value: 435 mg/m³, 100 ppm Short-term value: 651 mg/m³, 150 ppm Long-term value: 434 mg/m³, 100 ppm REL (USA) TLV (USA)

(Contd. on page 3)

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# Trade name Sodium acetylide, ca 18% slurry in xylenes

(Contd. of page 2) Ingredients with biological limit values: 1330-20-7 Xylenes (82,0%) BGW (Germany) 1,5 mg/l b Xylol 2 g/l U Methylhippur-(Tolur-)Säure BEI (USA) 1,5 g/g creatinine urine end of shift

Methylhippuric acids Additional information: No data

8.2 Exposure controls Personal protective equipment General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. Use breathing protection with high concentrations. Check protective gloves prior to each use for their proper condition. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Impervious gloves

Breathing equipment: Protection of hands:

Material of gloves Penetration time of glove material Impervious gloves Not determined

Tightly sealed safety glasses. Full face protection Protective work clothing. Eye protection: **Body protection:** 

## SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information Appearance: Form: Colour: Gray to pale brown Not determined Odour threshold: Not determined. pH-value: Not determined.

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined Not determined Not determined

25 °C Inflammability (solid, gaseous) Ignition temperature:
Decomposition temperature:
Self-inflammability: Not determined. 465 °C Not determined Product is not selfigniting.

Critical values for explosion:

1,0 Vol % 7,0 Vol % 10 hPa 0,865 g/cm<sup>3</sup> Not determined. Lower: Upper:

Upper:
Steam pressure at 20 °C:
Density at 20 °C
Relative density
Vapour density
Evaporation rate
Solubility in / Miscibility with
Water: Not determined. Not determined. Water:

Reacts violently Contact with water releases flammable gases Not determined. Partition coefficient (n-octanol/water):

Viscosity: Not determined. kinematic: Not determined.

Solvent content: Organic solvents:

82,0 % Solids content: 18,0 %

9.2 Other information No further relevant information available

# SECTION 10: Stability and reactivity

Thermal decomposition / conditions to be

10.1 Reactivity

10.2 Chemical stability

Reacts violently with water. In contact with water releases flammable gases which may ignite spontaneously. Stable under recommended storage conditions.

No decomposition if used and stored according to specifications. avoided: 10.3 Possibility of hazardous reactions

Contact with water releases flammable gases Reacts violently with water

10.5 Incompatible materials:

Air Bases

Water/moisture

Carbon monoxide and carbon dioxide Sodium oxide 10.6 Hazardous decomposition products:

# SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

Harmful if inhaled.

Harmful in contact with skin.

(Contd. on page 4)

(Contd. on page 5)

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•	(Contd. of page 3
	Danger by skin resorption.  Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
LD/LC50 values that are relevant for classific	cation:
1330-20-7 Xylenes Oral LD50   4300 mg/kg (rat)	
Skin irritation or corrosion: Eye irritation or corrosion: Sensitization: Germ cell mutagenicity: Carcinogenicity:	Causes severe skin burns. Causes serious eye damage. No sensitizing effect known. No effects known. No effects known. EPA-I: Data are inadequate for an assessment of human carcinogenic potential. IARC-3: Not classifiable as to carcinogenicity to humans. ACGIH, A4: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of
Reproductive toxicity:	its carcinogenicity in humans and/or animals.  No effects known.
Specific target organ system toxicity - repeated exposure: Specific target organ system toxicity - single	No effects known.
exposure: Aspiration hazard: Additional toxicological information:	No effects known.  No effects known.  To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.  The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:  Harmful  Corrosive
SECTION 12: Ecological information	
12.1 Toxicity Aquatic toxicity: 12.2 Persistence and degradability 12.3 Bioaccumulative potential 12.4 Mobility in soil Additional ecological information:	No further relevant information available.
General notes:  12.5 Results of PBT and vPvB assessment	Do not allow product to reach ground water, water bodies or sewage system. Do not allow material to be released to the environment without proper governmental permits. Water hazard class 2 (Self-assessment): hazardous for water. Danger to drinking water if even small quantities leak into soil. Avoid transfer into the environment.
PBT: vPvB: 12.6 Other adverse effects	Not applicable. Not applicable. No further relevant information available.
SECTION 13: Disposal considerations	
13.1 Waste treatment methods Recommendation	Hand over to disposers of hazardous waste.  Must be specially treated under adherence to official regulations.
Uncleaned packagings: Recommendation:	Consult state, local or national regulations for proper disposal.  Disposal must be made according to official regulations.
SECTION 14: Transport information	
UN-Number ADR, IMDG, IATA	UN3399
14.2 UN proper shipping name ADR	3399 ORGANOMETALLIC SUBSTANCE LIQUID WATER-REACTIVE
IMDG, IATA	FLAMMABLE (Sodium acetylide, XYLENES) ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE (Sodium acetylide, XYLENES)
14.3 Transport hazard class(es) ADR	
Class Label IMDG, IATA	4.3 (WF1) Substances which, in contact with water, emit flammable gases. 4.3+3
<b>3 3</b>	
Class Label	4.3 Substances which, in contact with water, emit flammable gases. 4.3+3
Packing group ADR, IMDG, IATA	II
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user Kemler Number:	Warning: Substances which, in contact with water, emit flammable gases. 323
14.7 Transport in bulk according to Annex II Code	of MARPOL73/78 and the IBC  Not applicable.
Transport/Additional information: ADR	
ADR Excepted quantities (EQ): Limited quantities (LQ) Transport category	E2 500 ml 0 D/F

# Safety data sheet according to 1907/2006/EC, Article 31

Revision: 14.08.2012

## Printing date 02.07.2013 Trade name Sodium acetylide, ca 18% slurry in xylenes (Contd. of page 4) UN3399, ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE (Sodium acetylide, XYLENES), 4.3 (3), II UN "Model Regulation": **SECTION 15: Regulatory information** 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture **Australian Inventory of Chemical Substances** 1330-20-7 Xylenes Standard for the Uniform Scheduling of Drugs and Poisons S6 1330-20-7 Xylenes Employment restrictions concerning young persons must be observed. For use only by technically qualified individuals. National regulations Information about limitation of use: Classification according to VbF: Technical instructions (air): Class Share in % NK 82,0 Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water. Other regulations, limitations and prohibitive regulations ELINCS (European List of Notified Chemical Substances) None of the ingredients is listed. Substances of very high concern (SVHC) according to REACH, Article 57 None of the ingredients are listed. REACH - Pre-registered substances 1330-20-7 | Xylenes 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out. **SECTION 16: Other information**Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. Flammable liquid and vapour. In contact with water releases flammable gases which may ignite spontaneously. Harmful in contact with skin. Causes severe skin burns and eye damage. Causes skin irritation. Harmful if inhaled. H226 Relevant phrases H260 H312 H314 H315 H332

Department issuing data specification sheet: Abbreviations and acronyms:

R10 Flammable.
R14/15 Reacts violently with water, liberating extremely flammable gases.
R20/21 Harmful by inhalation and in contact with skin.

R20/21 Harmful by inhalation and in contact with skin.
R34 Causes burns.
R38 Irritating to skin.
Health, Safety and Environmental Department.
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
VbF: Verordnung über brennbare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent