

SAFETY DATA SHEET
according to 830/2015/EC, 28.05.2015



Revision: 2012-09-17
Update: 2017-01-12

ADHESIVES FOR PLASTIC MODELS

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
P304+P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P501 - Dispose of contents/container to a mine waste dump

2.3. Other hazards

PBT – lack of information concerning fulfilment of the criteria in accordance with annex XIII of Reach Directive.
vPvB - lack of information concerning fulfilment of the criteria in accordance with annex XIII of Reach Directive.

3. Composition/information on ingredients

3.1. Substance: -

3.2. Mixtures

Description	CAS	EC	RECH No	Content %	Classification
Tetrahydrofuran	203-726-8	109-99-9	01- 2119444314- 46-XXXX	>60	Flam. Liq.2, H225, Eye Irrit. 2, H319 STOT SE. 3, H335, Carc 2, H351, EUH019
Acetone*	67-64-1	200-662-2	01- 2119471330- 49-0000	0÷25	Flam. Liq.2, H225, Eye Irrit.2, H319 STOT SE.3, H336, EUH066
Homopolimer styrenu	9003-53-6	-	-	>15	-

4. First aid measures

4.1 Description of first aid measures

After eye contact: Rinse immediately with plenty of water. If irritation persists, contact a physician.
After skin contact: Remove the adhesive with a dry cloth or a paper towel before washing with water and soap. If irritation persists, contact a physician.
After inhalation: In case of difficulties in breathing insure a fresh air and contact a physician.
After swallowing: Rinse the mouth thoroughly with water. If the exposed person is conscious – give them of water to drink. Call a doctor immediately showing the data of product or MSDS.

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

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

The decision of the method of further procedure should be made by a doctor after exact assessment of victim's conditions.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: CO₂, powders, foams resistant to alcohols, atomized water yet.
Unsuitable extinguishing measures: strong water yet.

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5.2. Special hazards arising from the substance or mixture

CO and other toxic gasses.

5.3. Advice for firefighters

Protective equipment: Protective clothes and self-contained breathing apparatus.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For persons not belonging to the staff removing the results of accident: Limit access of outsiders to the accident area until cleaning operation is finished. Avoid pollution of eyes and skin. Ensure good ventilation.

6.2. Environmental precautions:

Do not allow the product to reach sewage system, ground water and surface water. Inform a suitable lifesaving service.

6.3. Methods and material for containment and cleaning up:

In case of spillage of the adhesive, wipe or scrape or cover it with sand and take up mechanically and collect in special containers. Store accordance with local and state regulation. Remove ignition sources. Extinguish an open fire. In case of large spillage bund the adhesive, pump it up into appropriate containers. Wash away a contaminated surface.

6.4. Reference to other sections

Information concerning safe holding – section / chapter 7.

Information concerning personal protective equipment - section / chapter 8.

Information concerning utilisation - section / chapter 13.

7. Handling and storage

7.1. Precautions for safe handling:

Work in compliance with applicable industrial safety and hygiene rules. Work in well ventilated rooms. Packages which are not used should be stored in tightly closed containers. Take precautions at work with the product. Do not breathe vapours. Ensure a good ventilation in a work place. Avoid spillage and long lasting contact with skin and eyes. Do not enter sewage system.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry and well ventilated room, in tight containers (at temperature from +5°C to +25°C). Keep away from food. Protect from frost, heat, fire, and sparking devices. Do not store near oxidizing substances. Do not store in packages made of PVC. Protect from inflow of the air – because there's a possibility of production of peroxides.

7.3. Specific end use(s)

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8. Exposure controls/personal protection

The personal protection media should fulfil the requirements of instructions of the Cabinet of 21.12.2005 (Dz. U. No. 259, pos. 2173) Directive 89/686/WE (together with later changes). The employer is obliged to ensure measures of personal protection suitable for activities that are made and their cleaning and maintenance.

8.1. Control parameters

Ingredients with limit values that require monitoring at the work place.

Exposure control	NDS [mg/m ³]	NDSCH [mg/m ³]
tetrahydrofuran	150	300
acetone	600	1800

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8.2. Exposure controls

Observe the general rules of hygiene and safety. Ensure good ventilation in a work place. During work, do not eat, drink and smoke tobacco. Wash hands before breaks and at the end of work. Avoid contacts with eyes.

Breathing equipment:

Avoid breathing of vapours. In case of short contact with the mixture – ensure a filtering device for breathing. In case of long lasting and intensive contacts - wear self-container breathing apparatus.

Protection of hands and body:

Gloves must be made of material which has to be impermeable and resistant to the action of the preparation, e. g. from rubber. The material must also be checked prior to its application. It is recommended that the gloves should be changed regularly and also when they have any symptoms of their wear, damage or changes appearance (colour, elasticity, form and so on.)

Eye protection:

Protective glasses tightly closed.

Protection of body:

Working clothes.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Viscous liquid
Odour	Characteristic for heterocyclic carbohydrates
Colour	Colourless
Boiling point	62°C
Solubility in water	insoluble
Density	0,970 g/cm ³

9.2. Other information

Lack of additional tests.

10. Stability and reactivity

10.1. Reactivity

No data.

10.2. Chemical stability

The product is stable if it is correctly stored and handled..

10.3. Possibility of hazardous reactions

Reactions with oxidising agents
Reactions with strong acids

10.4. Conditions to avoid

Keep away from direct activity of sun rays.

10.5. Incompatible materials

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10.6. Hazardous decomposition products

CO, CO₂, NO_x

11. Toxicological information

11.1. Information on toxicological effects

The highest permissible concentration for tetrahydrofuran:

Acute toxicity – oral: LD50 -1650 mg/kg (rat)

Acute toxicity – inhalation: LC50 – 14,7 mg/l/4h (rat)

Acute toxicity – skin: LD50 > 2000 mg/kg (rabbit)

Influence on the human body: tetrahydrofuran irritates eyes and skin. Prolonged contact with the substance causes degreasing skin. Prolonged or repeated exposure to action of vapours causes depressive influence on the central nervous system, induces dizziness, and irritation to inhalation system – intensive cough.

The highest permissible concentration for Acetone:

Acute toxicity – oral: LD50 -5800 mg/kg (rat)

Influence on the human body: Acetone irritates eyes. Repeated exposure may cause drying or cracking skin. The vapours may produce feeling of sleepiness and dizziness.

12. Ecological information

12.1. Toxicity

The product has not been classified as dangerous for the environment. Do not allow the product to reach sewage system, water basins, ground water and soil.

For tetrahydrofuran:

Acute toxicity for fish: LC50=2160mg/l(96h)

Acute toxicity for daphnia: EC50=3485mg/l (48 h) - Daphnia magna

Toxicity for water plants: NOEC 3700mg/l/8 dni

Toxicity for microorganisms: EC50 460 mg/l – activated sludge

For acetone:

Acute toxicity for freshwater fish: LC50=5540 mg/l(96h)

Acute toxicity for saltwater fish: LC50=11 000 mg/l(96h)

Long lasting toxicity for daphnia: NOEC 2212 mg/l/28 days - Daphnia magna

Toxicity for freshwater algae : NOEC 530 mg/l/8 days

Toxicity for saltwater algae: NOEC 430 mg/l/96 h

Toxicity for microorganisms: EC50 460 mg/l – activated sludge

12.2. Persistence and degradability

Undergoes biodegradation..

Acetone: OECD 301B, 90.0+/-2.2% after 28 days.

tetrahydrofuran – undergoes biodegradation in oxygen conditions.

12.3. Bioaccumulative potential

Does not possess potential for bioaccumulation.

12.4. Mobility in soil

Lack of data for mixture.

Acetone may penetrate into soil: tests of adsorption/desorption – sorption, Kd soil: 1,5 l/kg w 20C⁰

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12.5. Results of PBT and vPvB assessment

PBT Lack of information concerning fulfilment of criteria in accordance with Annex XIII of Reach Directive.
vPvB Lack of information concerning fulfilment of criteria in accordance with Annex XIII of Reach Directive.

12.6. Other adverse effects

No data.

13. Disposal considerations

13.1. Waste treatment methods

May not undergo treatment together with household rubbish. Do not allow the product to reach sewage system. Store in original packages. Utilize in accordance with the correct regulations.

Waste code:

08 04 09 Waste adhesives and sealants containing no organic solvents or other dangerous substances.
15 01 10 Packaging containing residues of dangerous substances or contaminated with them.

EU Legal Instruments

Directives of European Parliament and Council 2006/12/EC and 94/62/EC, Directive of Council 91/689/EEC

State Legal Instruments

14. Transport information

14.1. UN-Number: 1133

Land transport ADR/RID and GGVSEB (international/state) Class ADR/RID – GGVSEB: 3 UN 1133

Sea transport IMDG/VSee: Class : 3 UN 1133

Air transport ICAO – TI IATA – DGR: Class : 3 UN 1133

14.2. Proper shipping name

ADHESIVE

14.3. Transport hazard class(es)

3

14.4. Packing group

III

14.5. Hazards to environment

Not applicable.

14.6. Special precautions for user

While handling the cargo, apply personal protection measures according to section 8.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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15. Regulatory information

15.1. Legislation related to safety, health and environment protection specific for substance or mixture:

The regulation of European Parliament and Council (EC) no. 1907/2006 of 18 December 2006 concerning the registration, evaluation, authorization and restriction of chemicals (REACH), for establishing the European Chemical Agency, changing the directive 1999/45/EC and cancelling the regulation of

EEC no.793/93 and the regulation of Committee(EC) no.1488/94, as well as the directive of council 76/769/EEC and the directives of Committee 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC,

The regulation of European Parliament and Council (EC) no.1272/2008 of 16 December 2008 concerning the classification, labelling and packing the substances and mixtures, changing and cancelling the directives 67/548/EEC and 1999/45/EC and changing the regulation (EC) no.1907/2006

The regulation of Committee (EC) no.790/2009 of 10 August 2009 adopting to the scientific and technological progress the regulation of European Parliament and Council (EC) no 1272/2008 of 16 December 2008 concerning the classification, labelling and packing the substances and mixtures

The regulation 453/2010/EU Council of 10.05.2010 changing the regulation no. 1907/2006/EU of European Parliament and Council concerning the registration, estimation, granting permissions and suitable limits in the range of chemicals (REACH)

The directive of European Parliament and Council no.2006/12/EC of 5 April 2006 concerning waste.

The directive of Council no. 91/689/EEC of 12 December 1991 concerning dangerous waste.

The directive of European Parliament and Council no 94/62/EU. of 20 December 1994 concerning packaging and packaging waste.

15.2. Estimation of chemical safety:

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16. Other information

Explanation of symbols in the 3 point of Safety Data Sheet:

R11-Highly flammable

H319 – Causes serious eye irritation

H225 – Highly flammable liquid and vapour

H226 – Flammable liquid and vapour

H335 – May cause respiratory irritation.

H336 – May cause drowsiness or dizziness

EUH 019 – May create explosive peroxides

STOT SE 3 – Acts toxically on destination organs – disposable exposure category. 3.

Eye Irrit. 2 – Irritating action on eyes category. 2

Flam. Liq. 2 – Inflammable liquid substance category. 2

EUH066 – Repeated exposure may cause drying and cracking skin.

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.

MSDS developed by NALMAT Trzebinia