

SAFETY DATA SHEET

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


ET02

Creation date	12. May 2015	Version	3.0
Revision date	03. March 2018		

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

- 1.1. Product identifier**
Substance / mixture ET02
Other mixture names mixture
EP TVRDIDLO
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
mixture's intended use Hardening of polyurethane paints. Only for industrial use
Disapproved uses of mixture 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**
Downstream user
Name or trade name COLOR WEST s.r.o.
Address Konzumní 207/14, Plzeň 10, 30100
Czech Republic
Identification number (ID) 25229184
Phone 371519401
E-mail nosek@colorwest.cz
Web address http://www.colorwest.cz/
Competent person responsible for the safety data sheet
Name Ing. Jan Gerstenberger
E-mail gerstenberger.j@gmail.com
- 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 classified as dangerous.
- Flam. Liq. 3, H226
Skin Corr. 1A, H314
Skin Sens. 1, H317
STOT SE 3, H335, H336
- Full text of all classifications and hazard statements is given in the section 16.
- Most serious adverse physico-chemical effects**
Flammable liquid and vapour.
- Most serious adverse effects on human health and the environment**
Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. May cause drowsiness or dizziness.
- 2.2. Label elements**
Hazard pictogram
- 
- Signal word**
Danger
- Hazardous substances**
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with acrylic acid and dipropylamine
2-methylpropan-1-ol

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Hazard statements

H226 Flammable liquid and vapour.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P235 Keep cool.
P260 Do not breathe vapours/spray.
P261 Avoid breathing vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a doctor if you feel unwell.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container to as hazardous waste.

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.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture

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: 153270-36-1 EC: 500-333-6 Registration number: 02-2119669675-21-0000	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with acrylic acid and dipropylamine	40-45	Skin Corr. 1B, H314 Skin Sens. 1, H317	
Index: 601-022-00-9d CAS: 1330-20-7 EC: 215-535-7 Registration number: 01-2119488216-32-xxxx	Xylene	20-40	Flam. Liq. 3, H226 Acute Tox. 4, H312, H332 Skin Irrit. 2, H315	1
Index: 603-108-00-1 CAS: 78-83-1 EC: 201-148-0	2-methylpropan-1-ol	15-20	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335, H336	

Notes

1 Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

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

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SECTION 4: First aid measures

4.1. Description of first aid measures

not available

Inhalation

Put the affected person into the open air. Lay the victim to a quiet place, cover and keep warm. If not breathing or breathing is irregular give artificial respiration or oxygen. If adverse health effects persist or are severe, consult a physician. If unconscious, place in recovery position and get medical attention immediately. Keep air passages free

Skin contact

Remove the contaminated clothing and shoes. Rinse /Wash affected skin with plenty of water and soap. Immediately call for medical help.

Eye contact

If the afflicted person wears contact lenses, they must be removed immediately. Rinse the eyes with eyelids open by stream of drinking water for at least 15 minutes. Immediately call for medical help.

Ingestion

If the afflicted person is conscious:

First rinse the mouth with water. Move victim to fresh air and keep at rest in a position comfortable for breathing. Make the affected person to take a sip of water. Stop if victim feels sick. Do not make the person vomit. If vomit, keep head in such a position, so as vomit will not get into the lungs.

If the person is unconscious:

First rinse the mouth with water. Move victim to fresh air and keep at rest in a position comfortable for breathing. Never give anything by mouth. Get medical attention immediately. Keep air passages free.

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

Inhalation

Possible irritation of respiratory pathways, cough, headache.

Skin contact

Skin irritation, redness, itching

Eye contact

Eye irritation, burning, lacrimation

Ingestion

Headache, dizziness, nausea, stomach ache, diarrhoea

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

There are no specific instructions.

More information

The mixture contains xylene. Specific instruction for xylene: chronic exposure of xylene can cause dermatitis. Aspiration can cause pulmonary oedema and pneumonia. After ingestion must be stomach evacuate by probang. Ingestion can cause damage of CNS, liver, reins, blood and marrow.

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

Fire produces heavy black smoke, it can be carbon oxides and another toxic gases produced (aldehydes, acids, monia, indefinableness mixtures of organic compounds). Inhalation of dangerous decomposition (pyrolytic) products can cause serious health damage. Solvent vapours are heavier than air and can be spread across the floor. Solvent vapours can create explosive mixtures with air.

5.3. Advice for firefighters

Cool closed containers exposed to fire with water spray. Do not allow contaminated extinguishing media to enter sewerage, ground- and surface waters. Use insulation breathing apparatus as well as complete protective clothing. Close the endangered area and secure the entry to authorized personnel only.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and goggles or face shield. Ensure adequate ventilation. Do not breathe vapour / aerosol. Remove all possible sources of ignition. No smoking and the use of naked flames. Ban on entry of unnecessary and unprotected personnel

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6.2. Environmental precautions

Prevent the product from leaking into the environment, ground and surface water, sewerage, or into the soil. Prevent the liquid from leaking by closing or sealing the leak.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage by non-combustible, absorbent material e.g. sand, soil, diatomaceous earth and place in container for disposal according to local regulations. Dispose via company that has a license for waste disposal. Contaminated absorbent material may pose the same hazard as the spilled product

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 (see Section 8). Provide good vapour ventilation of working area. Do not breathe vapours/ aerosol. Prevent contact with skin and eyes. When working, it is not allowed to drink, eat and smoke and it is necessary to maintain good personal hygiene. Keep container tightly closed. Prevent contact with heat, sparks, open flame or any other ignition source. Take precautionary measures against electrostatic discharges

7.2. Conditions for safe storage, including any incompatibilities

Store in original, tightly closed container protected from direct sunlight in dry, cool and well-ventilated spaces, away from incompatible materials (see Section 10) and food, feed and beverages. Containers must be properly labeled. Store away from: sources of ignition (open flames, sparks, hot surfaces), explosive substances. Store at temperatures of 2-40 ° C.

Storage class

3A - Flammable liquids (flash point below 55 °C)

Storage temperature

min 2 °C, max 40 °C

7.3. Specific end use(s)

See section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

none

DNEL

Xylene

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Inhalation	174 mg/m ³	Systemic acute effects	
Consumers	Dermal	108 mg/kg	Systemic chronic effects	
Consumers	Inhalation	14.8 mg/kg	Systemic chronic effects	
Consumers	Oral	1.6 mg/kg	Systemic chronic effects	
Workers	Inhalation	289 mg/m ³	Systemic acute effects	
Workers	Inhalation	77 mg/m ³	Systemic chronic effects	
Workers	Dermal	180 mg/kg	Systemic chronic effects	
Workers	Inhalation	289 mg/m ³	Systemic acute effects	
Workers	Inhalation	77 mg/m ³	Systemic chronic effects	

8.2. Exposure controls

Ensure adequate ventilation. Use closed workplace, local exhaust ventilation or other engineering controls to prevent exceeding exposure limits

Eye/face protection

Protective goggles with side shields or a face shield

Skin protection

Wear suitable protective gloves. Throughput time >= 8 hours. Glove material consult with glove manufacturer. Protective clothing and rubber boots, exposed skin before work protect with cream

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Respiratory protection

In case of short-term exposure or low concentrations use respirator with filter against organic vapours, against high concentrations and long-term exposure is required insulating respirator

Thermal hazard

not available

Environmental exposure controls

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

More information

Take off stained clothing immediately. Avoid contact with skin and eyes. Do not inhale gases, vapours and aerosols. When handling: do not eat, drink or smoke. Before breaks and after work wash your hands

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	transparent till yellowish
Physical state	liquid at 20°C
color	yellowish
Odour	after organic solvents
Odour threshold	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	137 °C
Flash point	30 °C
Evaporation rate	data not available
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	
bottom	1,1 %
upper	7,3 %
Vapour pressure	data not available
Vapour density	data not available
Relative density	data not available
Solubility(ies)	
solubility in water	insoluble
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
Oxidising properties	data not available

9.2. Other information

Density	1,03 - 1,07 g/cm ³
ignition temperature	data not available
Efflux time: 30s (cup diam. 4 mm)	

SECTION 10: Stability and reactivity

10.1. Reactivity

When used as recommended, it does not react

10.2. Chemical stability

When used as recommended, it does not decompose

10.3. Possibility of hazardous reactions

Avoid contact with strong acids, strong alkali, oxidizing agents

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10.4. Conditions to avoid

Avoid contact with sources of ignition.

10.5. Incompatible materials

Strong acids, strong alkali, oxidizing agents. Xylene damages rubber after long exposure, which becomes softer after its effect and decompose.

10.6. Hazardous decomposition products

Decomposition happens only due to the heat (burning) - see section 5

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Human experiences: xylene - LCLo (inh, human): 10000 ppm (6h) TCLo (inh, human): 200 ppm

Acute toxicity

Based on available data the classification criteria are not met.

Xylene

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD50	4300 mg/kg		Rat	
Dermal	LD50	>4350 mg/kg		Rat	
Inhalation	LC50	0.6350 mg/kg	4 hour	Rat	

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes severe skin burns and eye damage.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Based on available data the classification criteria are not met.

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

May cause respiratory irritation. May cause drowsiness or dizziness.

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

Aspiration hazard

Based on available data the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

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Acute toxicity

Data for the mixture are not available.

Xylene

Parameter	Value	Time of exposure	Species	Environment
LC50	26.7 mg/l	96 hour	Fishes	

12.2. Persistence and degradability

Biodegradability

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with acrylic acid and dipropylamine

Parameter	Value	Time of exposure	Environment	Result	Source
	1-2 %	28 day			ext. BL(MSDS)

Xylene

Parameter	Value	Time of exposure	Environment	Result	Source
	88 %	28 day			ext. BL/MSDS

For product no information available

12.3. Bioaccumulative potential

Xylene

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Source
BCF	6-23					ext. BL/MSDS
Log Pow	3.1-3.2					ext. BL/MSDS

For product no information available

12.4. Mobility in soil

Xylene

Parameter	Value	Environment	Surrounding temperature	Source
Log Koc	48-540			ext. BL/MSDS

For product no information 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

Prevent the product from leaking into the environment, water resources, sewerage, or soil. See Section 6.2

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.

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Legislation of waste

Council Directive 75/442/EEC on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended. Council Directive 75/442/EEC on waste, as amended. Decree No. 383/2001 Coll., on details regarding waste handling as amended. Decree No. 93/2016 Coll., (waste catalogue) as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

08 01 11 waste paint and varnish containing organic solvents or other dangerous substances
08 01 17 wastes from paint or varnish removal containing organic solvents or other dangerous substances

Packaging waste type code

15 01 10 packaging containing residues of or contaminated by dangerous substances
15 02 02 absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances

SECTION 14: Transport information

14.1. UN number

UN 2734

14.2. UN proper shipping name

AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S.

14.3. Transport hazard class(es)

8 Corrosive substances

14.4. Packing group

II - substances presenting medium danger

14.5. Environmental hazards

not available

14.6. Special precautions for user

Reference in Sections 4 to 8.

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

Not applicable

Additional information

Hazard identification No.

UN number

Classification code

Safety signs

83 (Kemler Code)

2734

CF1

8+3



Air transport - ICAO/IATA

Packaging instructions passenger 851

Cargo packaging instructions 855

Marine transport - IMDG

EmS (emergency plan) F-E, S-C

Marine pollution No

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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. The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations as amended (the Chemical Act). Decree No. 432/2003 Coll., laying down conditions for assigning categories to individual jobs, limit values of indices from biological exposure tests, conditions for the sampling of biological materials for biological exposure and the particulars of the reports on work with asbestos and biological agents as amended.

15.2. Chemical safety assessment

Not done

SECTION 16: Other information

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

H226	Flammable liquid and vapour.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

Guidelines for safe handling used in the safety data sheet

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P235	Keep cool.
P260	Do not breathe vapours/spray.
P261	Avoid breathing vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to as hazardous waste.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P312	Call a doctor if you feel unwell.

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 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
EC50	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan

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EU	European Union
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC50	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
LC50	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD50	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 Kow	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 Dam.	Serious eye damage
Flam. Liq.	Flammable liquid
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization
STOT SE	Specific target organ toxicity - single exposure

Training guidelines

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

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

Safety Data Sheets of raw materials, the ECHA website, the registration dossier

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

Article(s): 2,11,12,13,14,15,16

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.