













SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation

Humiseal Thinner 64

of the mixture

Revision date

Registration number

Synonyms None.

Product code HumiSeal Europe Thinner 64

Issue date 04-June-2015

Version number

08-December-2017

Supersedes date 04-June-2015

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

Identified uses Thinner for Protective Coating

02

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name HUMISEAL EUROPE LTD.

Address 505 Eskdale Road

Winnersh

Wokingham Berkshire RG41 5TU

UK

Division A CHASE CORPORATION COMPANY

Telephone General Assistance 44 (0) 118 944 2333

e-mail europetechsupport@chasecorp.com

Contact person Not available.

1.4. Emergency telephone

number

Chemtrec USA 1-800-424-9300

OutSide USA +1 703-741-5970

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards

Flammable liquids Category 2 H225 - Highly flammable liquid and

vapour.

Health hazards

Skin corrosion/irritation Category 2 H315 - Causes skin irritation.

Reproductive toxicity (the unborn child) Category 2

Specific target organ toxicity - repeated exposure Category 2 H373 - May cause damage to organs through prolonged or

repeated exposure.

Aspiration hazard Category 1 H304 - May be fatal if swallowed

and enters airways.

Material name: Humiseal Thinner 64

SDS UK

Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard

Category 3

H412 - Harmful to aquatic life with long lasting effects.

Hazard summary

May be ignited by heat, sparks or flames. May cause damage to organs through prolonged or repeated exposure. Causes skin irritation. Possible reproductive hazard. Dangerous for the

environment if discharged into watercourses.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Toluene Contains:

Hazard pictograms



Signal word Danger

Hazard statements

Highly flammable liquid and vapour. H225 Flammable liquid and vapour. H226 May be fatal if swallowed and enters airways.

H304

Causes skin irritation. H315

May cause damage to organs through prolonged or repeated exposure. H373

Harmful to aquatic life with long lasting effects. H412

Precautionary statements

Prevention

Obtain special instructions before use. P201

Do not handle until all safety precautions have been read and understood. P202

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P210

Keep container tightly closed. P233

Ground/bond container and receiving equipment. P240

Use explosion-proof electrical/ventilating/lighting equipment. P241

Use only non-sparking tools. P242

Take precautionary measures against static discharge. P243

Do not breathe mist or vapour. P260 Wash thoroughly after handling. P264 Avoid release to the environment. P273

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

Response

IF SWALLOWED: Immediately call a POISON CENTRE/doctor. P301 + P310

Do NOT induce vomiting. P331

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with P303 + P361 + P353

water/shower.

IF exposed or concerned: Get medical advice/attention. P308 + P313 If skin irritation occurs: Get medical advice/attention. P332 + P313 Take off contaminated clothing and wash it before reuse. P362 + P364 In case of fire: Use appropriate media to extinguish. P370 + P378

Storage

Store in a well-ventilated place. Keep cool. P403 + P235

Store locked up. P405

Disposal

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

Supplemental label information 90 % of the mixture consists of component(s) of unknown acute oral toxicity. 90 % of the mixture

consists of component(s) of unknown acute dermal toxicity. 100 % of the mixture consists of component(s) of unknown acute inhalation toxicity. 100 % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 90 % of the mixture consists of

component(s) of unknown long-term hazards to the aquatic environment. 90 % of the mixture

consists of component(s) of unknown long-term hazards to the aquatic environment.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Material name: Humiseal Thinner 64 HumiSeal Europe Thinner 64 Version #: 02 Revision date: 08-December-2017 Issue date: 04-June-2015

General information

Chemical name		%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
PROPYLENE GLYCOL MONOMETHYL ETHER		90 - 100	108-65-6 203-603-9	01-2119475791-29-xxxx	607-195-00-7	#
Classification:	Flam. Liq. 3	3;H226				
Toluene		85-95	108-88-3 203-625-9	01-2119471310-51-XXXX	601-021-00-3	#
Classification:	Flam. Liq. 2;H225, Asp. Tox. 1;H304, Skin Irrit. 2;H315, STOT SE 3;H336, Repr. 2;H361d, STOT RE 2;H373, Aquatic Chronic 2;H411					

List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008. DSD: Directive 67/548/EEC.

M: M-factor

vPvB: very persistent and very bioaccumulative substance. PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Community workplace exposure limit(s).

The full text for all R- and H-phrases is displayed in section 16. **Composition comments**

SECTION 4: First aid measures

General information Take off all contaminated clothing immediately. IF exposed or concerned: Get medical

> advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing

before reuse.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation

occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Get medical attention if irritation develops and persists.

Rinse mouth. Get medical attention if symptoms occur. Ingestion

4.2. Most important symptoms and effects, both acute and

delayed

Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and

pain. Prolonged exposure may cause chronic effects.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards Flammable liquid and vapour.

5.1. Extinguishing media

Suitable extinguishing

media

Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do

so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials. Specific methods

Material name: Humiseal Thinner 64

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

For emergency responders

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during

6.2. Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

6.3. Methods and material for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil etc) away from spilled material. This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapour. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

550 mg/m3

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE (CAS 108-65-6)	STEL	548 mg/m3
,		100 ppm
	TWA	274 mg/m3
		50 ppm
Toluene (CAS 108-88-3)	STEL	384 mg/m3
		100 ppm
	TWA	191 mg/m3
		50 ppm
EU. Indicative Exposure Limit Val	ues in Directives 91/322/EEC.	2000/39/EC, 2006/15/EC, 2009/161/EU
Components	Type	Value

ACETATE (CAS 108-65-6) Material name: Humiseal Thinner 64

PROPYLENE GLYCOL

MONOMETHYL ETHER

STEL

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

Components **Type** Value 100 ppm **TWA** 275 mg/m3 50 ppm Toluene (CAS 108-88-3) STEL 384 mg/m3 100 ppm **TWA** 192 mg/m3 50 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring

procedures

Follow standard monitoring procedures.

Derived no effect levels

(DNELs)

Not available.

Predicted no effect

concentrations (PNECs)

Not available.

Exposure guidelines

UK EH40 WEL: Skin designation

PROPYLENE GLYCOL MONOMETHYL ETHER

ACETATE (CAS 108-65-6) Toluene (CAS 108-88-3)

Can be absorbed through the skin. Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering

controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Personal protection equipment should be chosen

according to the CEN standards and in discussion with the supplier of the personal protective

equipment.

Eye/face protection

Skin protection

Chemical respirator with organic vapour cartridge and full facepiece.

- Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. - Other

Chemical respirator with organic vapour cartridge and full facepiece. Respiratory protection

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures When using do not smoke. Always observe good personal hygiene measures, such as washing

after handling the material and before eating, drinking, and/or smoking. Routinely wash work

clothing and protective equipment to remove contaminants.

Environmental exposure

controls

Inform appropriate managerial or supervisory personnel of all environmental releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Liquid. Liquid. Form Colour Clear. Aromatic Odour **Odour threshold** Not available. Does not apply.

-94.9 °C (-138.82 °F) estimated Melting point/freezing point Initial boiling point and boiling

range

110.6 °C (231.08 °F) estimated

25.0 °C (77.0 °F) Flash point

Evaporation rate 0.9 BuAc

Material name: Humiseal Thinner 64

Flammability (solid, gas) Not applicable.

0.9 % estimated

Upper/lower flammability or explosive limits

(%)

Flammability limit - upper 6.8

Flammability limit - lower

(%)

Vapour pressure 8.49 hPa estimated

Vapour density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Negligible.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 480 °C (896 °F) estimated

Decomposition temperatureNot available.ViscosityNot available.Explosive propertiesNot explosive.Oxidising propertiesNot oxidising.

9.2. Other information

Density 0.86 g/cm3 estimated

Miscible (water)Negligible.Percent volatile100 %Specific gravity0.95VOC100 %

SECTION 10: Stability and reactivity

10.1. ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability Material is stable under normal conditions.

10.3. Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

10.5. Incompatible materials Strong oxidising agents.

10.6. Hazardous No hazardous decomposition products are known.

decomposition products

10.4. Conditions to avoid

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation May cause damage to organs through prolonged or repeated exposure by inhalation.

Skin contact Causes skin irritation.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of

occupational exposure.

Symptoms Skin irritation. May cause redness and pain.

11.1. Information on toxicological effects

Acute toxicity Not known.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Respiratory sensitisation

Due to partial or complete lack of data the classification is not possible.

Skin sensitisation

Due to partial or complete lack of data the classification is not possible.

Germ cell mutagenicity

Due to partial or complete lack of data the classification is not possible.

Carcinogenicity

Due to partial or complete lack of data the classification is not possible.

IARC Monographs. Overall Evaluation of Carcinogenicity

Toluene (CAS 108-88-3) 3 Not classifiable as to carcinogenicity to humans.

Material name: Humiseal Thinner 64

SDS LIK

Reproductive toxicity Suspected of damaging the unborn child.

Specific target organ toxicity -

single exposure

Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity -

repeated exposure
Aspiration hazard

May cause damage to organs through prolonged or repeated exposure.

Due to partial or complete lack of data the classification is not possible.

Mixture versus substance

No information available.

information

Other information Not available.

SECTION 12: Ecological information

12.1. Toxicity Harmful to aquatic life with long lasting effects.

Components		Species	Test results		
Toluene (CAS 108-88-3)	Foluene (CAS 108-88-3)				
Aquatic					
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours		
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	8.11 mg/l, 96 hours		

^{*} Estimates for product may be based on additional component data not shown.

12.2. Persistence and

No data is available on the degradability of this product.

degradability

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Toluene 2.73

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

12.5. Results of PBT Not available.

and vPvB assessment

12.6. Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some

product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

EU waste codeThe Waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number UN1263

14.2. UN proper shipping Paint related material

name

14.3. Transport hazard class(es)

Class 3
Subsidiary risk Label(s) 3
Hazard No. (ADR) 33
Tunnel restriction code D/E
14.4. Packing group II

Material name: Humiseal Thinner 64

SDS UK

14.5. Environmental hazards No. 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user RID 14.1. UN number UN1263 PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid 14.2. UN proper shipping lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound) name 14.3. Transport hazard class(es) Class 3 Subsidiary risk 3 Label(s) Ш 14.4. Packing group 14.5. Environmental hazards No. Read safety instructions, SDS and emergency procedures before handling. 14.6. Special precautions for user **ADN** UN1263 14.1. UN number Paint related material 14.2. UN proper shipping name 14.3. Transport hazard class(es) 3 Class Subsidiary risk 3 Label(s) Ш 14.4. Packing group 14.5. Environmental hazards No. 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user **IATA** 14.1. UN number UN1263 PAINT RELATED MATERIAL 14.2. UN proper shipping name 14.3. Transport hazard class(es) Class Subsidiary risk 14.4. Packing group Ш 14.5. Environmental hazards No. **ERG Code** 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user Other information Passenger and cargo Allowed with restrictions. aircraft Cargo aircraft only Allowed with restrictions.

IMDG

14.1. UN number UN1263

14.2. UN proper shipping PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

3 Class Subsidiary risk Ш 14.4. Packing group 14.5. Environmental hazards Marine pollutant No. F-E, S-D **EmS**

14.6. Special precautions

for user

Read safety instructions, SDS and emergency procedures before handling.

14.7. Transport in bulk Not established.

according to Annex II of Marpol

and the IBC Code

Material name: Humiseal Thinner 64 HumiSeal Europe Thinner 64 Version #: 02 Revision date: 08-December-2017 Issue date: 04-June-2015



SECTION 15: Regulatory information

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

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended Toluene (CAS 108-88-3)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE (CAS 108-65-6)

Toluene (CAS 108-88-3)

The product is classified and labelled in accordance with EC directives or respective national laws. Other regulations

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. Pregnant women should not work with the product, if there is the least risk of exposure.

Young people under 18 years old are not allowed to work with this product according to EU **National regulations**

Directive 94/33/EC on the protection of young people at work. Follow national regulation for work

with chemical agents.

15.2. Chemical safety

assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Not available. List of abbreviations Not available. References

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation

methods and test data, if available.

Material name: Humiseal Thinner 64

SDS LIK

HumiSeal Europe Thinner 64 Version #: 02 Revision date: 08-December-2017 Issue date: 04-June-2015

Full text of any H-statements not written out in full under Sections 2 to 15

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness. H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Revision information SECTION 2: Hazards identification: Hazard statements

SECTION 2: Hazards identification: Prevention SECTION 2: Hazards identification: Response

SECTION 2: Hazards identification: Supplemental label information

Composition / Information on Ingredients: Ingredients SECTION 11: Toxicological information: Acute toxicity

SECTION 16: Other information: Disclaimer

Training information

Follow training instructions when handling this material.

Disclaimer

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create any warranty, expressed or implied. It is the responsibility of the user to determine the applicability of this

information and the suitability of the material or product for any particular purpose

Material name: Humiseal Thinner 64

SDS UK 10 / 10