



1. Identification of the substance or mixture and of the supplier

Manufacturer's Name:
 American Building Restoration Products, Inc.
 9720 S. 60th Street
 Franklin, WI. 53132

Emergency Phone No.
 Chemtrec 1-800-424-9300

Product Trade Name:
 Hydro Seal 300

DOT Proper Shipping Name:
 Buffing or Polishing Compound N.O.S.

Recommended use and restrictions:
 Hydro Seal 300 is a water repellent designed to protect surfaces against the environmental forces of wind, rain, snow, ice and sun that can promote cracking, spalling, pop out, mold, and mildew.
 Do not thin this product
 Do not apply if freezing temperatures are eminent or if rain is forecasted within 12 hours.
 Ideal temperature range for application is 40°F to 90°F.

2. Hazards identification

Non Hazardous under the provisions of:
 United States 29CFR1910(5)(ii)

3. Composition/information on ingredients

Substance and Composition

% RAWS	INGREDIENT	CAS #	CAS # ACTIVE INGREDIENT	HSNO CLASSIFICATION(S)
42-53%	EMULSION	64742-51-4	63449-39-8	6.7B, 6.8C, 9.1A
25-32%	WATER	7732-18-5	7732-18-5	NO CLASSIFICATION



12-17%	THFA	97-99-4	97-99-4	3.1D, 6.1D, 6.3B, 6.4A, 9.3C
2.0- 3.0%	GLYCOL ETHER DB	112-34-5	112-34-5	3.1D, 6.1E, 6.3B, 6.4A, 6.9B
1.0- 2.5%	DIPENTENE	138-86-3	138-86-3	3.1C, 6.3B, 6.4A 9.1A
1.0- 2.5%	MINERAL OIL	64741-89-5	64741-89-5	6.1E, 9.1D
1.0- 2.0%	PROPYLENE GLYCOL	68037-64-9	68037-64-9	6.3B, 6.4A
0.1- 1.0%	FUNGICIDE	55406-53-6 25322-68-3	55406-53-6	6.1C, 6.3B, 6.4A 6.5B, 6.9B, 9.1A 9.3C
0.1- 1.0%	PHOTOSTABILIZER	1330-20-7 52829-07-9	1330-20-7	3.1C, 6.1D, 6.1E, 6.3A, 6.4A, 6.8B 6.9B, 9.1D, 9.3C

NOTE: For information on ingredients, the competent authority rules for CBI take priority over the rules for product identification.

4. First aid measures

Threshold Limit Value: N/A

Effects of Over Exposure: None

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Wash at least 15 minutes with water. If irritation persists, consult a Physician.

SKIN: Wash with soap and water

INHALATION: No ill effects expected

INGESTION: Do not cause regurgitation. Drink 2-3 glasses of water or milk

5. Firefighting measures

Flash Point: None

Extinguishing Media: N/A

Special Fire Fighting Procedures: None

Unusual Fire and Explosion Hazards: None

6. Accidental release measures



Steps to be taken in case material is released or spilled: Mop up spills immediately. Both the emulsion and the dried film may present a slippery hazard. Coagulate with either dry calcium chloride or a concentrated solution of calcium chloride, and transfer to chemical waste drum.

WASTE DISPOSAL METHOD:

Contact local municipal, state, or federal agencies to ensure compliance of disposal methods with current regulations.

NOTE:

Empty containers can have residues, gases or mists and are subject to proper waste disposal.

7. Handling and storage

Precautions to be taken in handling and storing:

Keep from freezing.

Other Precautions:

8. Exposure controls/personal protection.

Respiratory Protection:

No special protection required

Ventilation: Normal

Protective Gloves: Impervious

Eye Protection:

Chemical splash goggles (ANSI 2-81.1/equivalent)

Other Protective Equipment: None

9. Physical and chemical properties

Boiling Point: 212°F

Specific Gravity: approx. 1.0



Vapor Pressure (mm Hg/Deg. F.): 17.5mm @ 25°C

Vapor Density (Air=1): approx 1.0

Percent Volatile By Volume (%): 70

Solubility in Water: Dispersible

Evaporation Rate (BAc=1): approx 1.0

Appearance and Odor:

White Emulsion, Ammonia Odor.

V.O.C.: <250 g/L

10. Stability and reactivity

Stability: Stable

Incompatibility: None

Hazardous Decomposition Products: None

Hazardous Polymerization: Will not occur

Conditions to Avoid:

11. Toxicological information

ORAL CLASS: 6.1D

ORAL LD50: 800 MG/KG BW

ORAL KEY STUDY (6.1D): [97-99-4] LD50 Guinea pig single oral 0.8 to 1.6 g/kg [Verschueren, K. Handbook of Environmental Data of Organic Chemicals. 2nd ed. New York, NY: Van Nostrand Reinhold Co., 1983. 1088]**PEER REVIEWED**[HSDB]

[55406-53-6] Oral LD50--rat 1.1 g/kg (F) 99% Technical 1.5 g/kg (M&F) Category III. The Acute Oral LD in female rats was 1.1 g/kg with a Toxicity Category of III (guideline 81- 501;Gargus, J. (1984) Acute Oral Toxicity Study in Rats: 3-Iodo-2-Propynyl Butyl Carbamate: Final Report: Project No. 2277-100. Unpublished study prepared by Hazleton Laboratories America, Inc. 28 p). [REDS/USEPA]

[1330-20-7] LD50 Mouse oral 1590 mg/kg /Xylene/ [Hayes, W.J., Jr., E.R. Laws, Jr., (eds.). Handbook of Pesticide Toxicology. Volume 2. Classes of Pesticides. New York, NY: Academic



Press, Inc., 1991. 643]**PEER REVIEWED [HSDB]

ORAL CLASS: 6.1E

ORAL LD50: 2000 MG/KG BW

ORAL KEY STUDY (6.1E): [112-34-5] "DEGBE is of low acute toxicity following oral administration and dermal application in experimental animals with oral LD50 values ranging from 2000 to 9600 mg/kg bw (rats, mice, rabbits, and guinea pigs). [Danish EPA (2003) Report on the Health Effects of Selected Pesticide Coformulants. Pesticide Research No 80.]

[64741-89-5] Aspiration hazard [CONCOWE]

ORAL CLASS: 6.9B

ORAL LD50: 51 MG/KG BW/DY

ORAL ENDPOINT: LOAEL

ORAL TARGET ORGAN: NEPHROTOXICITY (KIDNEY), Hepatotoxicity/
Alimentary system (liver), NEUROTOXICITY (NERVOUS SYSTEM)

ORAL KEY STUDY (6.9B): [112-34-5] Species: rat Sex: male/female
Strain: Fischer 344
Route of admin.: gavage
Exposure period: 90 days
Frequency of treatment: 5 days/week
Post. obs. period: none
Doses: 65, 327 or 1630 mg/kg bw/day (males) or 51, 254 or 1270 mg/kg
bw/day (females).
Control Group: yes
NOAEL: mg/kg bw
LOAEL: = 51 mg/kg bw
Method: other: see remark
Year: 1986 GLP: no
Test substance: as prescribed by 1.1 - 1.4
Remark: Method:
Number of animals: 16/sex/group. Following interim sacrifice at 6
weeks all dose groups consisted of 10/sex, except the high dose
group, which consisted of 4/sex/group (see resultsmortality).
Examinations included clinical signs, body weight, food consumption,
organ weights, clinical chemistry, haematology, urinalysis and
pathology. Statistics
were not performed at highest dose groups due to the high mortality.

Comments and conclusion:

The study is suitable for evaluation.

The decreased MCHC in females is considered as not toxicologically
significant, because no effects on RBC, Hb and PCV were observed.

The increased creatinine levels in the males of the low- and mid-dose group accompanied with increased relative kidney weight in high-dose males and the decreased WBC and lymphocytes in females of the low- and middose group are considered as toxicologically significant. Therefore, a NOAEL cannot be established. The LOAEL is 51 mg/kg bw/d.

Result: Results:

Mortality: After 13 weeks exposure mortality for males and females was 0, 0, 60, 83 and 0, 10, 30 and 92%, respectively for controls, low, mid and high dose groups

Body weight gain: decreased in highest dose group (males)

Food consumption: decreased in highest dose group (males and females)

Clinical signs: no treatment-related findings

Organ weights:

- absolute and relative liver weight increased in mid dose males. Also increased in the remaining males and females of the high dose group

- increased relative kidney weight in the remaining males of the high dose group

Urinalysis: no treatment-related effects.

Clinical chemistry: increased AP and urinary NAG values in mid and high dosed males .

Haematology: dose-related decrease in mean corpuscular haemoglobin concentration, white blood cell count (WBC) and lymphocytes in females of the low and middose groups

Histopathology: gross and microscopic lesions were restricted to the thoracic cavity and respiratory tract.

Pulmonary congestion and edema in rats that died during the study.

12-MAR-1996

(87)Hobson, D.W., Wyman, J.F., Lee, L.H., Bruner., R.H., Uddin, D.E., The subchronic toxicity of diethylene glycol monobutylether administered orally to rats, Naval Medical

Research Institute, NMRI 87-45, aug 1987 (IUCLID 2000)

[55406-53-6] In a subchronic oral toxicity study, male and female Sprague-Dawley rats received IPBC technical by gavage for 13 weeks at doses of 0, 20, 50, and 125 mg/kg/day. An additional satellite group was dosed at 125 mg/kg/day and held for a 28-day observation period following the 13-week dosing regimen. At the 125 mg/kg/day dose level, body weight gain was decreased by 19% in male rats for weeks 1-13 of the study, and by 12% in female rats over the same period. Absolute liver weight was increased by 20% in male rats at the 125 mg/kg/day dose, and by 31% in female rats at this dose level. Liver to body weight ratio was significantly increased by approximately 31% in both male and female rats at the 125 mg/kg/day dose level, while kidney to body weight ratio in female rats was increased 18% at the 125 mg/kg/day dose level. The systemic NOEL was considered to be 20 mg/kg/day, while the systemic LEL was considered to be 50 mg/kg/day, based on increased liver to body weight ratio. This study is classified as core supplementary data (guideline 82-1; Gordon, E. (1984) Troysan Polyphase (IPBC): 90-Day

Subchronic Oral Toxicity Test in Rats: Project ID: BSC/No. 11787. Unpublished study prepared by Bioassay Systems Corp. 151 p). Although this guideline is not satisfied, acceptable chronic toxicity data are available and therefore, additional oral subchronic data are not required.
[REDS/USEPA]

The endpoint for chronic exposure, several months to lifetime was selected from the chronic toxicity/carcinogenicity study in rats. The endpoint for use in risk assessment is the NOEL of 20 mg/kg/day, based on the observation in male and female rats of decreased body weight gain at the LEL of 20 mg/kg/day dose level (Mulhern, M.; Everett, D.; Perry, C.; et al. (1989) 3-Iodo-2-propynyl Butyl Carbamate (IPBC): 104 Week Dietary Carcinogenicity Study in Rats: Lab Project Number: 435580: Report No. 7115. Unpublished study prepared by Inveresk Research International. 972 p).
[REDS/USEPA]

[1330-20-7] The major target organ is the nervous system. At lower levels, around and somewhat above the TLV, reversible neurobehavioural effects are the first to be observed. These can be of concern as some, e.g. impaired balance and reaction time, may confer a greater risk of work-related injury [INCHEM]

INHALATION CLASS: 6.1C

INHALATION VALUE = 0.68 MG/L

INHALATION ENDPOINT: LC50

INHALATION KEY STUDY (6.1C): [55406-53-6] ANIMAL DATA
Inhalation LC50--rat 98.2% IPBC - 0.68 mg/L (M&F) Category III
The acute inhalation LC50 in male and female rats was 0.68 mg/L with a Toxicity Category of III (guide-line 81-3; Hoffman, G. (1990) Acute Inhalation Toxicity Study in the Rat: Troysan Polyphase P-100: Lab Project Number: 90-8277. Unpublished study prepared by Troy Chemical Corp. 209 p.
[REDS/USEPA]

INHALATION CLASS: 6.1E

INHALATION VALUE = 27.6 MG/L

INHALATION ENDPOINT: LC50

INHALATION FORM: VAPOR

INHALATION KEY STUDY (6.1E): [1330-20-7] Type: LC50 Inhalation
Species: rat
Exposure time: 4 hour(s)
Value: 6350 ppm

Method: other: unknown

Year: GLP: no data

Test substance: other TS: mixed xylenes (undefined composition)

Remark: Range of values: 6350 - 11,000 ppm.

The mixed xylenes have a low order of inhalation toxicity.

Depression of the nervous system was observed.

Source: TOTAL PARIS LA DEFENSE (57) Hine, C. H. and Zuidema, H. H.

The Toxicological Properties of Hydrocarbon Solvents. Industrial Medicine. Vol. 39, 215-220, 1970. (63) Carpenter, C. P., Rinkead, E.

R., Geary, J. D. L., Sullivan, L. J. and King, J. M. Petroleum

Hydrocarbon Toxicity Studies. V. Animal and Human Response to Vapours of Mixed Xylenes. Toxicology and Applied Pharmacology, Vol.

33, 543-558, 1975.

(64) Lundberg, I., Edkahl, M., Kronevi, T., Lidmus, V. and

Lundberg, S. Relative Hepatotoxicity of Some Industrial

Solvents After Intraperitoneal Injection or Inhalation

Exposure in Rats. Environmental Research, Vol. 40, 411-420,

1986. (65) Lundberg, I., Hakansson, M., et.al. Relative Hepatotoxic Effects of Five Industrial Solvents After Inhalation

Exposure of Rats. Arbete och Halsa. Vol. 22, 39-40

(English Summary), 1982. [IUCLID 2000]

INHALATION CLASS: 6.9B

INHALATION VALUE = 0.04 MG/L/DY

INHALATION ENDPOINT: LOAEL

INHALATION TARGET ORGAN: Hepatotoxicity/ Alimentary system (liver), NEUROTOXICITY (NERVOUS SYSTEM)

INHALATION KEY STUDY (6.9B): [112-34-5] Result: Method:

Number of animals: 15/sex/group. Whole-body exposure.

Examinations included clinical signs, body weight, organ weights, clinical chemistry and pathology.

Results

Target concentration: 2, 6 and 18 ppm

Actual concentration: 2.09 +/- 0.28, 5.69 +/- 0.78 and 18.5 +/- 2.6 ppm

Mortality: none

Clinical signs: no treatment-related findings

Body weight changes: no treatment-related findings

Organ weights:

- Statistically significant decreased relative liver weight in males of mid and high dose group (dose-related)

- dose-related increased relative liver weight in females of the mid and high dose group; statistically significant in high dose group only

Haematology: no treatment-related findings

Urinalysis: no treatment-related findings

Clinical chemistry: statistically significant increased AP levels in males of high dose group.

Histopathology: Slight paleness of the liver in 3/10 females of the high dose group

- Slight hepatocyte vacuolization consistent with fatty change was observed in 3/10, 4/10, 9/10 and 10/10 females of the control, low, mid and high dose group, respectively. These effects were very slight in 7/10, 6/10, 1/10 and 0/10 females of the control, low, mid and high dose group, respectively.

Comments and conclusion:

The study is suitable for evaluation.

The NOAEL is 0.040 mg/l, based on the histopathological changes of the liver together with increased liver weight and paleness of the liver in the high-dosed females. The decreased liver weight in males of the mid-dose group were not accompanied by histological changes and is considered to be not treatment-related.11-JAN-1996

(82) Gushow, T.S., Miller, R.R., Yano, B.L. Dowanol DB: A 5-week repeated vapor inhalation study in rats, Dow Chemical report (1984) (IUCLID 2000)

[1330-20-7] Inhalation of xylenes at concn of 435-1300 mg/cu m for 15 min to 6 hr/day for 4 days results in CNS disturbances including changes in numerative ability, reaction time, short-term memory and electroencephalograph.

[USEPA; Advisory Opinion for Xylenes (Dimethyl benzenes) (Draft) p.6 (1981)]**PEER REVIEWED** [HSDB]

DERMAL CLASS: 6.1D

DERMAL KEY STUDY (6.1D): [1330-20-7] R-Phrases: (20/21) Harmful by inhalation and in contact with skin [IUCLID 2000]

DERMAL CLASS: 6.1E

DERMAL LD50: 2700 MG/KG BW

DERMAL KEY STUDY (6.1E): [112-34-5] LD50 - ROUTE: Skin; DOSE: 2700 mg/kg [Journal of the American College of Toxicology. (Mary Ann Liebert, Inc., 1651 Third Ave., New York, NY 10128) V.1-12, 1982-1993. Discontinued. (12,139,1993)] [RTECS]

[55406-53-6] ANIMAL DATA

Dermal LD50--rabbit 98% IPBC>2,000 mg/kg

The Acute Dermal LD50 in rabbits was found to be >2,000 mg/kg with a Toxicity Category of III (guideline 81-2; FitzGerald, G. (1991)

Acute Dermal Study: Troysan Polyphase P-100: Lab

Project Number: 91G-0988. Unpublished study prepared by Toxikon Corp. 15p.

[REDS/USEPA]

DERMAL CLASS: 6.9B



DERMAL LD50: 20 MG/KG BW

DERMAL ENDPOINT: NOEC

DERMAL TARGET ORGAN (6.9B): Hepatotoxicity/ Alimentary system (liver)

DERMAL KEY STUDY (6.9B): [55406-53-6] Toxic Endpoints of Concern The Agency's (OPP) Toxic Endpoint Selection Committee concluded (June 4, 1996) that for dermal absorption a calculated value of 10% should be used. This value was derived from the LOEL of 50 mg/kg/day in the 90 day oral study in rats (Gordon, E. (1984) Troysan Polyphase (IPBC): 90-Day Subchronic Oral Toxicity Test in Rats: Project ID: BSC/No. 11787. Unpublished study prepared by Bioassay Systems Corp. 151 p.) and the LOEL of 500 mg/kg/day in the 90 day dermal study in rats (Siglin, J. (1991) 91-Day Dermal Toxicity Study in Rats with Troysan Polyphase P-100: Final Report: Lab Project Number: 3228.14. Unpublished study prepared by Springborn Labs., Inc. 365 p.). The LOELs were used because of the minimal effects seen at the LOELs.

The short term occupational or residential exposure (1 to 7 days) and the intermediate term occupational or residential (1 week to several months) exposure endpoint was selected from the subchronic dermal toxicity study in rats (Siglin, J. (1991) 91-Day Dermal Toxicity Study in Rats with Troysan Polyphase P-100: Final Report: Lab Project Number: 3228.14. Unpublished study prepared by Springborn Labs., Inc. 365 p). Systemic toxicity was observed in both male and female rats from repeated dermal administration of IPBC at 500 mg/kg/day.

In males, decreased body weight gain, clinical chemistry alterations, and dermal irritation were observed at 500 mg/kg/day. In female rats, significant changes in hematological and clinical chemistry parameters were observed at 500 mg/kg/day in addition to dermal irritation. Females in this study showed inhibition of plasma cholinesterase at 500 mg/kg/day test article, which may have been the result of either direct liver toxicity or inhibition of cholinesterase itself.

Based upon the results of this study, the systemic NOEL is 200 mg/kg/day, and the systemic LEL is 500mg/kg/day for male and female rats.

The endpoint for use in risk assessment is the NOEL of 200 mg/kg/day based on decreased body weight gain, alterations in clinical chemistry parameters, and dermal irritation at 500 mg/kg/day.

The endpoint for chronic exposure, several months to lifetime was selected from the chronic toxicity/carcinogenicity study in rats. The endpoint for use in risk assessment is the NOEL of 20 mg/kg/day, based on the observation in male and female rats of decreased body weight gain at the LEL of 20 mg/kg/day dose level (Mulhern, M.; Everett, D.; Perry, C.; et al. (1989) 3-Iodo-2-propynyl Butyl Carbamate (IPBC): 104 Week Dietary Carcinogenicity Study in Rats: Lab Project Number: 435580: Report No. 7115. Unpublished study prepared by Inveresk Research International. 972 p).

[REDS/USEPA]

The systemic NOEL was considered to be 20 mg/kg/day, while the systemic LEL was considered to be 50 mg/kg/day, based on increased liver to body weight ratio. This study is classified as core supplementary data (guideline 82-1; Gordon, E. (1984) Troysan Polyphase (IPBC): 90-Day Subchronic Oral Toxicity Test in Rats: Project ID: BSC/No. 11787. Unpublished study prepared by Bioassay Systems Corp. 151 p). Although this guideline is not satisfied, acceptable chronic toxicity data are available and therefore, additional oral subchronic data are not required.

[REDS/USEPA]

6.3/8.2 CLASS: 6.3A

6.3/8.2 KEY STUDY: [1330-20-7] Classification: as in Directive 67/548/EEC

Class of danger: irritating

R-Phrases: (38) Irritating to skin [IUCLID 2000]

And based on weight of evidence from:

(57) Hine, C. H. and Zuidema, H. H. The Toxicological Properties of Hydrocarbon Solvents. Industrial Medicine. Vol. 39, 215-220, 1970. [IUCLID 2000]

(71) Sbornik Vysledku Toxikologickeho Vysetreni Latek A Pripravku," J.V.Marhold, Institut Pro Vychovu Vedoucicn Pracovniku Cheickeho Prumyclu Praha, Czechoslovakia, 1972. [IUCLID 2000]

6.3/8.2 CLASS: 6.3B

6.3/8.2 KEY STUDY: [97-99-4] WHEN TESTED ON THE GUINEA PIG THE MATERIAL WAS FOUND TO BE MODERATELY IRRITATING, NOT TO BE A SENSITIZER, & TO BE ABSORBED THROUGH THE SKIN, THE LD50 BEING LESS THAN 5 ML/KG. [Clayton, G. D. and F. E. Clayton (eds.). Patty's Industrial Hygiene and Toxicology: Volume 2A, 2B, 2C: Toxicology. 3rd ed. New York: John Wiley Sons, 1981-1982. 4658]**PEER REVIEWED** [HSDB]

[112-34-5] 17-JUL-1995(78)Southwood, J. (1987) Butyl dieyhoxol: Skin irritation study, ICI Report No. CTL/T/2533 (IUCLID 2000)

[112-34-5] Irritation of the skin may produce erythema (Clayton & Clayton, 1982).
[Meditext]

[138-86-3] SKIN - STANDARD DRAIZE TEST
Rabbit

ROUTE: Skin; DOSE: 500 mg/24H; REACTION:

Moderate [Food and Cosmetics Toxicology.

(London, UK) V.1-

19, 1963-81. For publisher

Information, see FCTOD7. (12,703,1974)] [RTECS]

[55406-53-6] ANIMAL DATA

Dermal Irritation--rabbit* slightly irritating IV

The technical grade of IPBC was slightly irritating to the skin of white rabbits (guideline 81-5; Cuthbert, J. ; Jackson, D. (1989) Troysan Polyphase P100: Primary Skin Irritation Test in Rabbits: Lab Project Number: IRI 243912. Unpublished study prepared by Inveresk Research International Ltd. 19 p. [REDS/USEPA]

6.8A/B CLASS: 6.8B

6.8A/B VALUE = 0.5 MG/L

6.8A/B KEY STUDY: [1330-20-7] No adequate studies of reproduction and development toxicity in humans exposed to xylene alone have been published. Placental transfer of xylene has been shown in humans and in experimental animals. Teratogenicity studies in pregnant animals exposed to technical xylene or xylene isomers during organogenesis indicate that xylene may cause reduced fetal weight and delayed ossification, but not malformations, at dose levels causing no or only slight maternal toxicity. LOAEL values of 500-2175 mg/m³ (115-500 ppm) have been reported, depending on the length of the daily exposure periods (6-24 h/day). Signs of delayed ossification in the absence of lower fetal body weight have been reported at lower dose levels. However, these findings cannot be properly evaluated owing to incomplete description of the criteria for assessing ossification. A NOAEL for delayed fetal development cannot therefore be established.

In a study of postnatal development in rat offspring prenatally exposed to 870 or 2175 mg/m³ (200 or 500 ppm) technical xylene, behavioural impairments indicating effects on the development of the central nervous system were detected. There was no maternal toxicity, and the effects at 2175 mg/m³ (500 ppm) were long-lasting as they were apparent in adult offspring. As 870 mg/m³ (200 ppm) was the lowest dose level investigated for this effect a NOAEL could not be established. [INCHEM]

6.4/8.3 CLASS: 6.4A

6.4/8.3 KEY STUDY: [97-99-4] In rabbit eyes 24 hours after application of 0.1 ml there was still irritation and increased thickness of the cornea. [Grant, W.M. Toxicology of the Eye. 3rd ed. Springfield, IL: Charles C. Thomas Publisher, 1986. 894]**PEER REVIEWED** [HSDB]

[112-34-5] 18-MAY-1995 (80)Ballantyne, B (1984), J. Toxicol. Cut. Ocular Toxicol. 3, 7. (IUCLID 2000)

[112-34-5] Classification: as in Directive 67/548/EEC

Class of danger: irritating
R-Phrases: (36) Irritating to eyes
[IUCLID 2000]

[138-86-3] Concentrated d-limonene is found to irritate rabbit skin, rabbit ear and human skin. Further, d-limonene irritates rabbit eye. Health effects of selected chemicals 2. d-Limonene and d/l-limonene
Authors: Josefsson C Nordic chemicals group
Source: TA:Nord PG:105-35 YR:1993 IP: VI:29
[TOXLINE]

[55406-53-6] Eye Irritation--rabbit - 97% IPBC severely irritating Category I
In a primary eye irritation study in rabbits (guideline 81-4; Bush, R. (1990) Primary Eye Irritation Study in Rabbits with Troysan Polyphase P-100: Final Report: Lab Project Number: SLS 3228.1. Unpublished study prepared by Springborn Labs, Inc. 27 p.
[REDS/USEPA]

[1330-20-7] [Xylene (CAS No. 1330-20-7) was tested for eye irritation. The test substance was applied at 0.1 ml to the conjunctival sac of one eye of each of 6 rabbits (sex not reported) Mild iritis was observed in most eyes at 1 hour; slight corneal opacity was observed in 2 eyes at 24 hours, and 1 eye at 48 hours. Moderate conjunctival irritation was present in most eyes at 1 and 24 hours, but was slight at 48 and 72 hours. All eyes were normal by 7 days.
[STANDARD OIL CO; The Eye and Skin Irritation Potential of Xylene; 02/09/77; Document No. 878220855; Fiche No. OTS0215109]
[TSCATS]

9.3C CLASS: 9.3C

9.3 ACUTE VALUE: 800 MG/KG BW

9.3 END POINT = LD50

9.3 KEY STUDY: [97-99-4] LD50 Guinea pig single oral 0.8 to 1.6 g/kg (1200 mg/kg) [Verschueren, K. Handbook of Environmental Data of Organic Chemicals. 2nd ed. New York, NY: Van Nostrand Reinhold Co., 1983. 1088]**PEER REVIEWED**[HSDB]

[55406-53-6] ACUTE ORAL
Bobwhite quail *Colinus virginianus*-23WKS-Guideline 71-1 - Oral 98.2% ai 14 Day LD50 749 mg/kg confidence limits 552-1004 curve slope 3.7 NOEL 292 mg/kg bw study 1992
Campbell, S.; Lynn, S. (1992) Troysan Polyphase P-100: An Acute Oral Toxicity Study with the Northern Bobwhite: Lab Project Number: 273-103. Unpublished study prepared by Wildlife International Ltd. 20 p.
[OPP pest ecotox dbase/REDS/USEPA]

[1330-20-7] LD50 Mouse oral 1590 mg/kg /Xylene/
[Hayes, W.J., Jr., E.R. Laws, Jr., (eds.). Handbook of Pesticide Toxicology. Volume 2. Classes of Pesticides. New York, NY: Academic Press, Inc., 1991. 643]**PEER REVIEWED [HSDB]

6.5B CLASS: 6.5B

6.5 KEY STUDY: [55406-53-6] Based on company data. Not a sensitizer (6.5B) below 0.32%

6.7B: [63449-39-8] There is sufficient evidence for the carcinogenicity of a commercial chlorinated paraffin product of average carbon-chain length C12 and average degree of chlorination 60% in experimental animals.

There is limited evidence for the carcinogenicity of a commercial chlorinated paraffin product of average carbon-chain length C23 and average degree of chlorination 43% in experimental animals.

No data were available from studies in humans on the carcinogenicity of chlorinated paraffins.

Overall evaluation

Chlorinated paraffins of average carbon-chain length C12 and average degree of chlorination approximately 60% are possibly carcinogenic to humans (Group 2B).

[IARC]

6.8C: [63449-39-8] An intermediate chain length chlorinated paraffin (C14-17) with 52% chlorination (CP-MH) was given in the diet to Charles River rats at dose levels of 0, 100, 1000 and 6250 mg/kg feed (equivalent to 0, 6, 62 and 384 mg/kg body weight per day for the males and 0, 8, 74 or 463 mg/kg body weight per day for the females based on food consumption data) (IRDC, 1985). The diet was fed both males and females for 28 days before mating, during mating, and for females up to postnatal day 21. Pups were given the same diet from weaning until 70 days of age. No differences were observed in appearance, fertility, body-weight gain, food consumption, or reproductive performance in the F0 generation. Among the offspring, no adverse effects were observed prior to lactation day 7. However, significantly decreased pup survival was observed in the high-dose group on lactation day 10. None of the pups in this group survived to weaning. Survival in pups from the mid-dose group was decreased by lactation day 21. Necropsy findings in animals that died included pale liver, kidneys and lungs, and blood in the cranial cavity, brain, stomach and intestines. The pup weights were lower in the low-dose group (not statistically significant) and mid-dose group than in the control group on

lactation day 21. In females, the reduced weight continued after weaning but became less pronounced in males. Other observations in the pups of the mid- and high-dose groups included bruised areas, decreased activity, laboured breathing, pale discoloration and/or blood around orifices. Reduced erythrocyte count, haemoglobin and haematocrit were noted in the pups in the high-dose group on lactation day 6 relative to the control values obtained on lactation day 7. The observations in this study could indicate a high exposure of the pups to chlorinated paraffins via the milk. This is supported by preliminary results of a cross-fostering study showing a greater mortality in pups exposed via milk than in pups exposed only in utero (Serrone et al., 1987).

The LOEL was 5.7 mg/kg body weight per day (males) or 7.2 mg/kg body weight per day (females) in the F1 generation based on decreased pup weight.

(EHC 181, 1996) [INCHEM]

FISH CLASS = 9.1A

FISH VALUE = 0.06

FISH ACUTE MEASURE = 96HR LC50

FISH KEY STUDY: [63449-39-8] Oncorhynchus mykiss Rainbow trout, donaldson trout LC50 MOR INC

FW 96 H; F F 0.060, 0.06 - 0.08 mg/L

Reference Number: 6797

Author(s): Mayer, F.L.J., and M.R. Ellersieck

Publication Year: 1986

Title: Manual of Acute Toxicity: Interpretation and Data Base for 410 Chemicals and 66 Species of Freshwater Animals

Reference Source: Resour.Publ.No.160, U.S.Dep.Interior, Fish Wildl.Serv., Washington, DC :505 p. (USGS Data File)

[ECOTOX]

[55406-53-6] Rainbow trout 97.7% A.I. LC50 0.067 ppm NOEL 0.016ppm Sousa, J. (1990) Troysan Polyphase P-100: Acute Toxicity to Rainbow Trout (Oncorhynchus mykiss) Under Flow-Through Conditions. Final Report: Lab Project Number: SLI 90-03-3261; 12166. 0789.6100. 108. Unpublished study prepared by Springborn Labs, Inc. 43 p.

[REDS/USEPA]

FISH CLASS = 9.1D

FISH VALUE = 3.3

FISH ACUTE MEASURE = 96HR LC50

FISH KEY STUDY: [1330-20-7] Oncorhynchus mykiss

Rainbow trout, donaldson trout
Endpoint: LC50, Effect: Mortality, Trend: Increasing
Medium: Fresh Water, Duration: 96 Hr
Exposure: Static, F= 3300ug/l, Confidence: 2661 - 4093ug/l =>
3.3mg/l
Reference Number: 6797, Author(s): Mayer, F.L.J., and M.R.
Ellersieck, Publication Year: 1986, Title: Manual of Acute
Toxicity: Interpretation and Data Base for 410 Chemicals and 66
Species of Freshwater Animals
Reference Source: Resour.Publ.No.160, U.S.Dep.Interior, Fish
Wildl.Serv., Washington, DC :505, [ECOTOX]

CRUSTACEA CLASS = 9.1A

CRUSTACEA VALUE = 0.037

CRUSTACEA ACUTE MEASURE = 48 HR EC50

CRUSTACEA KEY STUDY: [63449-39-8] Daphnia magna was studied in a 48-h test with C14-17;52% Cl and C18-20;52% Cl. Using the water-soluble fraction of a loading concentration of 100 mg/litre, an EC50 of 37 µg/litre for the intermediate chain length chlorinated paraffin and an EC0 of > 26 µg/litre for the long chain length chlorinated paraffin were observed. In a 21-day reproduction test, daphnids were exposed to the water-soluble fraction of both chlorinated paraffins. With a loading of 100 mg/litre, a no-observed-effect concentration of 4.4-8.8 µg/litre was found for reproduction rate and parent mortality (LOEC = 19.9-35.6 µg/litre) for the intermediate chain length chlorinated paraffin. For the long chain length chlorinated paraffin, a LOEC of < 1.2 µg/litre was found for the same two parameters. In these studies it was observed that a higher loading concentration of 10 g/litre caused an increase in the effect concentrations (Frank & Steinhäuser, in press). (EHC 181, 1996) [INCHEM]

[55406-53-6] CRUSTACEA

Water flea-Daphnia magna-<24 hr old Guideline 72-2 Flow 97.5%ai 48 hr-EC50 0.16 PPM confid limits 0.14-0.17 Curve slope 8.25 NOEL 0.076 ppm Study date 1994

Boeri, R.; Magazu, J.; Ward, T. (1994) Acute Toxicity of Omacide IPBC to the Daphnid, Daphnia magna: Lab Project Number: 292-OL. Unpublished study prepared by T. R. Wilbury Labs, Inc. 28 p. [OPP pest ecotox dbase/REDS/USEPA]

CRUSTACEA CLASS = 9.1D

CRUSTACEA VALUE = 8.5

CRUSTACEA ACUTE MEASURE = 48 HR LC50

CRUSTACEA KEY STUDY: [1330-20-7] Species: Palaemonetes pugio

(Crustacea)

Exposure period: 48 hour(s)

Unit: µg/l Analytical monitoring: yes

LC50 : 8500ug/l => 8.5mg/l

Method: other: no data

Year: GLP: no data

Test substance: other TS: mixed xylenes (undefined composition)

Source: TOTAL PARIS LA DEFENSE

(52) [IUCLID 2000]

ALGAL CLASS = 9.1A

ALGAL VALUE = 0.02

ALGAL ACUTE MEASURE = LOEC

ALGAL KEY STUDY: [63449-39-8] A short chain chlorinated paraffin of 58 % chlorination caused growth retardation in a green alga at 0.57 mg/l and above, in a marine diatom at 0.02 mg/l and above. For short chain chlorinated paraffins of 56 % to 61 % chlorination nominal NOEC values ranging from 0.06 to 0.5 mg/l for stabilized products and from < 0.1 to 1 mg/l for unstabilized products were, however, determined when they were dispersed in water with the aid of an emulsifier. In the case of chlorinated paraffin C10-12, 58 % chlorine, unstabilized, with 0.1 ml acetone/l water, reduced swimming activity and erratic movements of the Daphnia were observed at concentrations of 0.024 mg/l and above; the EC50 for immobilization amounted to 0.53 mg/l (above the water solubility). For a long chain type of 60 % chlorination the NOEC values were 45 mg/l, stabilized, and 23 mg/l, unstabilized, both with emulsifier. In general toxic values were only attained above the water solubility level (because of 'floating' presumably < 0.1 mg/l for short chain types, < 0.005 mg/l for long chain ones). In the case of the short chain types, a chronic toxic effect in the Daphnia occurs within the range of water solubility. Depending on experimental methods and toxicity criteria, the NOEC either amounts to 0.005 mg/l (chronic toxicity to parents and offspring, C10-12, 58 % chlorine, with acetone) or ranges from 0.02 to 0.05 mg/l (chronic toxicity to parents, 5 short chain types, with emulsifier). The NOEC of the long chain chlorinated paraffin, amounting to 4.2 mg/l, lies above the water solubility of < 0.005 mg/l (nominal concentrations). In fish, chlorinated paraffins did not show any acute toxic effects regardless of chain length and chlorination percentage. The LC50 values at 96 h exposure, amounting to 5 9/1 water in the bleak *Alburnus alburnus*, lay above the water solubility. Sublethal and lethal effects in rainbow trout at chronic exposure (60 days) were only shown by a short chain chlorinated paraffin with 58 % chlorine. Behavioural symptoms were observed at 0.033 mg/l and above, i.e. in the range of water solubility (0.15 mg/l); mortality was significantly elevated only at 0.35 mg/l and above (i.e. above water solubility). Isolated fatalities, however, occurred at lower concentrations. From this an LC50 of 0-34 mg/l (above water

solubility) is calculated. Medium and long chain chlorinated paraffins were non-toxic to rainbow trout at 60 days exposure up to the highest concentrations investigated, 4.5 mg/l and 3.8 mg/l, respectively. The concentrations studied in medium and long chain chlorinated paraffins exceeded their water solubilities of 0.005 and < 0.005 mg/l, respectively. In a further study in rainbow trout over 168 days, the same short chain chlorinated paraffin with 58 % chlorine caused neither elevated mortality nor significant changes in growth at 0.0034 and 0.0171 mg/l. Changes in behaviour were observed. The same chlorinated paraffin reduced size and weight of larvae of the marine sheepshead minnow *Cyprinodon variegatus* in the embryo and larvae fish test at 0.62 mg/l and above (NOEC 0.28 mg/l, above water solubility). Chlorinated Paraffins (June 1992)
 Authors: Anonymous Source: TA:Beratergremium fuer umweltrelevante Altstoffe (BUA) PG:227 p YR:1996 IP: VI:93 [Advisory committee for environmentally relevant waste materials]
 [TOXLINE]

[55406-53-6] ALGAE
 Selenastrum capricornutum
 Green algae 97.5 A.I. EC50 ITX FW 5 Day Static - F 100, 90 - 160 ppb NOEL 89ppb
 Author(s): Office of Pesticide Programs
 Publication Year: 1995
 Title: Environmental Effects Database (EEDB)
 Reference Source: Environmental Fate and Effects Division, U.S.EPA, Washington, D.C.
 [ECOTOX/OPP pest ecotox dbase]

ALGAL CLASS = 9.1D

ALGAL VALUE = 10

ALGAL ACUTE MEASURE = 72HR LC50

ALGAL KEY STUDY: [1330-20-7] Species: *Skeletonema costatum* (Algae)
 Endpoint: growth rate
 Exposure period: 72 hour(s)
 Unit: µg/l Analytical monitoring: no
 other: effect con10000ation :10000 => 10mg/l
 Method: other: no data
 Year: GLP: no data
 Test substance: other TS: mixed xylenes (undefined composition)
 Remark: Exposure period 4 to 72 hours.
 Toxicity or inhibition threshold, measured losses of 10-50%
 Source: TOTAL PARIS LA DEFENSE
 (54) [IUCLID 2000]

12. Ecological information

BIOACCUMULATIVE Components = YES [63449-39-8][138-86-3]



BCF VALUE = 7155

BIOACCUMULATIVE KEY STUDY: [63449-39-8] Chlorinated paraffins are bioaccumulated in aquatic organisms, and the reported bioconcentration factors (BCFs) are in the range of 7 to 7155 for fish and 223 to 138 000 for mussels. In fish, chlorinated paraffins of short chain length are accumulated to a higher degree than intermediate and long chain length chlorinated paraffins. Radioactivity has been found mainly in bile, intestine, liver, fat and gills after administration of radiolabelled chlorinated paraffins. The uptake of chlorinated paraffins seems to be more efficient for short chlorinated paraffins with low chlorine content; the elimination rate is slowest for short chlorinated paraffins with high chlorine content. The retention in fat-rich tissues appears to increase with increasing degree of chlorination. Chlorinated Paraffins (EHC 181, 1996) [INCHEM]

BIODEGRADATION KEY STUDY: [63449-39-8] Chlorinated paraffins are not readily biodegradable. Short carbon chain length chlorinated paraffins with a chlorine content of less than 50% appear to be degradable under aerobic conditions with acclimated microorganisms, whereas the degradation appears inhibited at a chlorine content above 58%. Intermediate and long chain length chlorinated paraffins are degraded more slowly. (EHC 181, 1996) [INCHEM]

PERSISTENT Components = YES [63449-39-8][138-86-3][64741-89-5]

BIOCIDAL Components = YES [138-86-3][64741-89-5][55406-53-6]

TERRESTRIAL FATE SOIL DT50 > 30 DAYS [63449-39-8]

13. Disposal considerations

Chlorinated paraffins and chlorinated alpha-olefins are not classified as "hazardous" under the U.S. Resource Conservation and Recovery Act (RCRA) regulations. Therefore, the presence of chlorinated paraffins in a waste, such as in used metalworking oils, does not by itself make the waste oil hazardous.

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Longer chain (C_{14} and above) CPs have much lower aquatic toxicity and solubility than C_{10-13} types. These longer chain products are not classified as Dangerous for the Environment. Nevertheless, the EU has proposed the same R50/53 label as for short-chain chlorinated paraffins despite the fact that they are less hazardous to the environment. Consequently, waste containing these products would not



be termed hazardous under Directive [91/689/EC](#).

Currently in the USA under the Federal Resource Conservation Recovery Act (RCRA) system, CPs are not regulated hazardous wastes. Ecotoxicity is among the general properties on the basis of which waste may be classified as hazardous. Therefore C₁₀₋₁₃ CPs could be classified as hazardous in case of an amendment. The detail of US state regulation is available on request.

14. Transport information

UN Number.



Irritant

UN Proper shipping name. Aqueous Mixture
 Transport Hazard class(es).
 Packing group, if applicable.



Marine pollutant (Yes/No). **Aqueous Mixture**

Special precautions which a user needs to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises.

15. Regulatory information

-----\Chemical Inventory Status - Part 1\-----

Ingredient	TSCA	EC	Japan
Australia			

Oil, Mineral (8012-95-1)	Yes	Yes	No
Yes			

--Canada--

Ingredient	Korea	DSL	NDSL	Phil.---
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Oil, Mineral (8012-95-1)	Yes	Yes	No	Yes
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-----\Federal, State & International Regulations - Part 1\-----

-SARA 302-SARA 313-

Ingredient	RQ	TPQ	List	Chemical Catg.
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Oil, Mineral (8012-95-1)	No	No	No	No
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