

Revision date 10-July-2020 Version 2 Supersedes Date: 20-May-2019

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Code R-F73001, R-F73004

Product Name National Rule Fast Reducer

Other means of identification

No information available

Recommended use of the chemical and restrictions on use

Paint, Coatings

Details of the supplier of the safety data sheet

See section 16 for more information

POR Products 38 Portman Rd New Rochelle, NY 10801 1-914-636-0700 Emergency telephone number

United States of America ChemTellnc. 1-800-255-3924 1-813-248-0585

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids Category 2

Skin irritation Category 2

Eye irritation Category 2A

Germ cell mutagenicity Category 1B

Carcinogenicity Category 2

Reproductive toxicity Category 2

Specific target organ tox- Category 3 (Central nervous system)

icity - single exposure

Category 2 (Auditory system, Eyes)

Specific target organ toxicity - repeated exposure

(Inhalation)

Aspiration hazard Category 1

GHS Label element

Hazard pictograms







Signal word

Danger

Hazard statements

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H340 May cause genetic defects.

H351 Suspected of causing cancer.

 ${\sf H361}$ Suspected of damaging fertility or the unborn

child.

H373 May cause damage to organs (Auditory system, Eyes) through prolonged or repeated exposure if

inhaled.

Precautionary statements

Prevention:

P201 Obtain special instructions before use.

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

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

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

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

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ sprav.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.

P281 Use personal protective equipment as required.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

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

P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P331 Do NOT induce vomiting.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

Carcinogenicity:

IARC Group 2B: Possibly carcinogenic to humans

64742-49-0

Naphtha (pet), hydrotreated

lt.

64742-89-8 Solvent naphtha (pet), lt

aliph.

ACGIH No component of this product present at levels greater

than or equal to 0.1% is identified as a carcinogen or

potential carcinogen by ACGIH.

OSHA No component of this product present at levels greater

than or equal to 0.1% is identified as a carcinogen or

potential carcinogen by OSHA.

NTP No component of this product present at levels greater

than or equal to 0.1% is identified as a known or antici-

pated carcinogen by NTP.

Emergency Overview

Appearance	liquid

Colour	clear, colourless
Odour	characteristic
Hazard Summary	No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical Name	Concentration (%)
67-64-1	Acetone	30 - 50
108-88-3	Toluene	20 - 30
64742-49-0	Naphtha (pet), hydrotreated lt	0 - 20
64742-89-8	Solvent naphtha (pet), lt aliph.	0 - 20
68410-97-9	Distillates, pet, It dist hydrotreat process, low-boil	0 - 20
123-86-4	n-Butyl acetate	10 - 20
142-82-5	Heptane	0.1 - 1

Special Notes: Functionally equivalent petroleum streams may be

found in this preparation at varying concentrations.

SECTION 4. FIRST AID MEASURES

General advice Move out of dangerous area.

Show this safety data sheet to the doctor in attend-

ance.

Symptoms of poisoning may appear several hours

later.

Do not leave the victim unattended.

If inhaled Consult a physician after significant exposure.

If unconscious place in recovery position and seek

medical advice.

In case of skin contact If skin irritation persists, call a physician.

If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact Immediately flush eye(s) with plenty of water.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed Keep respiratory tract clear.

Do NOT induce vomiting.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious per-

If symptoms persist, call a physician. Take victim immediately to hospital.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing

media

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

High volume water jet

Specific hazards during

firefighting

Do not allow run-off from fire fighting to enter drains

or water courses.

Hazardous combustion

products

No hazardous combustion products are known

Specific extinguishing

methods

Use a water spray to cool fully closed containers.

Further information Collect contaminated fire extinguishing water sepa-

> rately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing wa-

ter must be disposed of in accordance with local regu-

lations.

For safety reasons in case of fire, cans should be

stored separately in closed containments.

Special protective equip-

ment for firefighters

Wear self-contained breathing apparatus for fire-

fighting if necessary.

NFPA Flammable and Combustible Liquids Classification:

Flammable Liquid Class IB

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and Use personal protective equipment.

Ensure adequate ventilation.

emergency procedures Remove all sources of ignition.

Evacuate personnel to safe areas.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precau-

tions

Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains

inform respective authorities.

Methods and materials

for containment and

cleaning up

Contain spillage, and then collect with non-

combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regula-

tions (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling Avoid formation of aerosol.

Do not breathe vapours/dust.

Avoid exposure - obtain special instructions before

use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in

the application area.

Take precautionary measures against static discharg-

es.

Provide sufficient air exchange and/or exhaust in work

rooms.

Container may be opened only under exhaust ventila-

tion hood.

Open drum carefully as content may be under pres-

sure.

Dispose of rinse water in accordance with local and

national regulations.

Conditions for safe storage

No smoking.

Keep container tightly closed in a dry and well-

ventilated place.

Containers which are opened must be carefully re-

sealed and kept upright to prevent leakage.

Observe label precautions.

Electrical installations / working materials must com-

ply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters					
CAS-No.	Components	Value type (Form of	Control parame- ters / Permissi-	Basis	
		exposure)	ble concentra-		
			tion		
67-64-1	Acetone	TWA	500 ppm	ACGIH	
		STEL	750 ppm	ACGIH	
		TWA	250 ppm 590 mg/m3	NIOSH REL	
		TWA	1,000 ppm 2,400 mg/m3	OSHA Z-1	
		TWA	750 ppm 1,800 mg/m3	OSHA PO	
		STEL	1,000 ppm 2,400 mg/m3	OSHA PO	
108-88-3	Toluene	TWA	20 ppm	ACGIH	
		TWA	100 ppm 375 mg/m3	NIOSH REL	
		ST	150 ppm 560 mg/m3	NIOSH REL	
		TWA	200 ppm	OSHA Z-2	
		CEIL	300 ppm	OSHA Z-2	
		Peak	500 ppm	OSHA Z-2	
		TWA	100 ppm 375 mg/m3	OSHA PO	
		STEL	150 ppm 560 mg/m3	OSHA PO	
64742-49-0	Naphtha (pet), hydrotreated lt	TWA	500 ppm 2,000 mg/m3	OSHA Z-1	
		TWA	400 ppm 1,600 mg/m3	OSHA PO	
64742-89-8	Solvent naphtha (pet), lt aliph.	TWA	500 ppm 2,000 mg/m3	OSHA Z-1	
		TWA	400 ppm 1,600 mg/m3	OSHA PO	
123-86-4	n-Butyl acetate	TWA	150 ppm	ACGIH	
		STEL	200 ppm	ACGIH	
		ST	200 ppm 950 mg/m3	NIOSH REL	
		TWA	150 ppm 710 mg/m3	NIOSH REL	
		TWA	150 ppm 710 mg/m3	OSHA Z-1	
		TWA	150 ppm 710 mg/m3	OSHA PO	

		STEL	200 ppm 950 mg/m3	OSHA PO
142-82-5	Heptane	TWA	85 ppm 350 mg/m3	NIOSH REL
		С	440 ppm 1,800 mg/m3	NIOSH REL
		TWA	500 ppm 2,000 mg/m3	OSHA Z-1
		TWA	400 ppm 1,600 mg/m3	OSHA PO
		STEL	500 ppm 2,000 mg/m3	OSHA PO

Biological occupational exposure limits

Components	CAS-No.	Control parame-	Biological specimen		Permissi- ble con-	Basis
		ters		time	centration	
Acetone	67-64-1	Acetone	Urine	End of shift (As soon as possible after expo- sure ceases)	50 mg/l	ACGIH BEI
Toluene	108-88-	Toluene	In blood	Prior to last shift of work- week	0.02 mg/l	ACGIH BEI
		Toluene	Urine	End of shift (As soon as possible after expo- sure ceases)	0.03 mg/l	ACGIH BEI
		o-Cresol	Urine	End of shift (As soon as possible after expo- sure ceases)	0.3 mg/g Creatinine	ACGIH BEI

Personal protective equipment

Respiratory protection No personal respiratory protective equipment normally

required.

In the case of vapour formation use a respirator with

an approved filter.

Hand protection

Remarks The suitability for a specific workplace should be dis-

cussed with the producers of the protective gloves.

Eye protection Eye wash bottle with pure water

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal pro-

cessing problems.

Skin and body protection impervious clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work

place.

Hygiene measures When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid

Colour clear, colourless

Odour characteristic

Odour Threshold No data available

pH No data available

Freezing Point No data available

Boiling Point (Boiling 56 - 140 °C (133 - 284 °F)

point/boiling range) (1013 hPa)

Calculated Phase Transition Liquid/Gas

Flash point < -18 °C (-0.40 °F)

Evaporation rate

Ethyl Ether

Flammability (solid, gas) No data available

Vapour pressure

Burning rate No data available

Upper explosion limit 12.8 %(V)

Calculated Explosive Limit

Lower explosion limit 1.27 %(V)

Calculated Explosive Limit 231 mmHg @ 25 °C (77 °F) Calculated Vapor Pressure

Relative vapour density > 1(Air = 1.0)

Relative density 0.801 @ 20 °C (68 °F)

Density 0.801 g/cm3 @ 20 °C (68 °F)

Bulk density No data available

Water solubility No data available

Solubility in other sol-

vents

No data available

Partition coefficient: n-

octanol/water

No data available

Auto-ignition temperature No data available

Thermal decomposition No data available

Regulatory VOC (lbs/gal): 6.67

Regulatory VOC (g/l) : 801.30 Actual VOC (lbs/gal) : 3.38

Actual VOC (g/l) : 405.30

SECTION 10. STABILITY AND REACTIVITY

Reactivity No dangerous reaction known under conditions of

normal use.

Chemical stability Stable under normal conditions.

Possibility of hazardous

reactions

Product will not undergo hazardous polymerization.

Vapours may form explosive mixture with air.

Conditions to avoid Keep away from heat, flame, sparks and other ignition

sources.

Extremes of temperature and direct sunlight.

Incompatible materials

Acids alkalis

Amines Ammonia halogens nitrates

organic absorbents such as sawdust, peat moss,

ground corn cobs, etc.

Peroxides

Reducing agents

Strong oxidizing agents

Bases metal salts

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Method: Calculation method

Components:

67-64-1:

Acute oral toxicity LD50 (rat): 5,800 mg/kg

Acute inhalation toxicity LC50 (rat): 76.0 mg/l

Exposure time: 4 h

Acute dermal toxicity LD50 : > 7,426 mg/kg

108-88-3:

Acute oral toxicity LD50 (rat, male): > 5,580 mg/kg

Acute inhalation toxicity LC50 (rat, male and female): 28.1 mg/l

Exposure time: 4 h
Test atmosphere: vapour

rest atmosphere. Vapour

Method: OECD Test Guideline 403

Acute dermal toxicity LD50 (rabbit): > 5,000 mg/kg

64742-49-0:

Acute oral toxicity LD50 (rat, male and female): > 5,000 mg/kg

Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity Remarks: No data available

Acute dermal toxicity LD50 (rabbit, male and female): > 2,000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

64742-89-8:

Acute oral toxicity LD50 (rat, male and female): > 5,000 mg/kg

Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity Remarks: No data available

Acute dermal toxicity LD50 (rabbit, male and female): > 2,000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

68410-97-9:

Acute oral toxicity LD50 (rat): > 5,000 mg/kg

Acute inhalation toxicity Remarks: No data available

Acute dermal toxicity LD50 (rabbit): > 2,000 mg/kg

123-86-4:

Acute oral toxicity LD50 (rat): > 5,000 mg/kg

Method: OECD Test Guideline 423

GLP: no

Acute inhalation toxicity LC50 (rat, male and female): > 21 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Method: OECD Test Guideline 403

GLP: yes

Acute dermal toxicity LD50 (rabbit, male and female): > 5,000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

142-82-5:

Acute oral toxicity LD50 (rat, male and female): 5,000 mg/kg

Method: OECD Test Guideline 401

Symptoms: Salivation

GLP: yes

Remarks: Information given is based on data obtained

from similar substances.

Acute inhalation toxicity LC50 (rat, male and female): 73.5 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Method: OECD Test Guideline 403

Acute dermal toxicity LD50 (rabbit, male and female): > 2,000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

Remarks: Information given is based on data obtained

from similar substances.

Skin corrosion/irritation

Product:

Remarks: Irritating to skin.

Components:

67-64-1:

Species: rabbit Exposure time: 24 h Method: In vivo

Result: Mild skin irritation

108-88-3:

Species: rabbit Exposure time: 4 h Result: Irritating to skin.

64742-49-0:

Species: rabbit

Result: Irritating to skin.

64742-89-8:

Species: rabbit Exposure time: 4 h Result: Irritating to skin.

68410-97-9:

Species: rabbit

Result: Irritating to skin.

123-86-4:

Species: rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: no

142-82-5:

Species: rabbit Exposure time: 24 h

Method: OECD Test Guideline 404

Result: Irritating to skin.

GLP: yes

Remarks: Based on a similar product formulation.

Serious eye damage/eye irritation

Product:

Remarks: Irritating to eyes.

Components:

67-64-1:

Species: rabbit

Result: Irritating to eyes. Exposure time: 24 h

108-88-3:

Species: rabbit

Result: Irritating to eyes.

Method: OECD Test Guideline 405

64742-49-0:

Species: rabbit

Result: Irritating to eyes.

64742-89-8:

Species: rabbit

Result: Irritating to eyes.

68410-97-9:

Species: rabbit

Result: Irritating to eyes.

123-86-4:

Species: rabbit

Result: No eye irritation

GLP: yes

142-82-5:

Species: rabbit

Result: Irritating to eyes.

Method: OECD Test Guideline 405

GLP: yes

Remarks: Information given is based on data obtained from similar substances.

Respiratory or skin sensitisation

Components:

67-64-1:

Test Type: Maximization test

Species: guinea pig

Result: Did not cause sensitisation on laboratory animals.

108-88-3:

Test Type: Maximisation Test (GPMT)

Species: guinea pig

Result: Did not cause sensitisation on laboratory animals.

GLP: yes

64742-49-0:

Test Type: Buehler Test Species: guinea pig

Result: Did not cause sensitisation on laboratory animals.

64742-89-8:

Test Type: Buehler Test Species: guinea pig

Result: Did not cause sensitisation on laboratory animals.

123-86-4:

Species: guinea pig

Result: Did not cause sensitisation on laboratory animals.

142-82-5:

Test Type: Maximization test

Species: guinea pig

Method: OECD Test Guideline 406

Result: Does not cause skin sensitisation.

Remarks: Based on a similar product formulation.

Germ cell mutagenicity

Components:

67-64-1:

Genotoxicity in vitro Test Type: Mammalian cell gene mutation assay

Test species: Mouse lymphoma cells

Metabolic activation: Without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Test Type: Ames test

Metabolic activation: with and without metabolic acti-

vation

Method: OECD Test Guideline 471

Result: negative

Test Type: Chromosome aberration test in vitro Test species: Chinese hamster ovary (CHO)

Metabolic activation: with and without metabolic acti-

vation

Method: OECD Test Guideline 473

Result: negative

Genotoxicity in vivo Test Type: In vivo micronucleus test

Test species: mouse

Application Route: Oral Exposure time: 13 wk

Dose: 5,000, 10,000, 20,000 ppm

Result: negative

Germ cell mutagenicity-

Assessment

Tests on bacterial or mammalian cell cultures did not

show mutagenic effects.

108-88-3:

Genotoxicity in vitro Test Type: Mammalian cell gene mutation assay

Test species: Mouse lymphoma cells

Metabolic activation: with and without metabolic acti-

vation

Method: OECD Test Guideline 476

Result: negative

Genotoxicity in vivo Test Type: Dominant lethal assay

Test species: mouse (male)

Application Route: inhalation (vapour) Exposure time: 6 h/d, 5 d/wk for 8 wks

Dose: 0, 100, 400 ppm

Method: OECD Test Guideline 478

Result: negative

Germ cell mutagenicity-

Assessment

Tests on bacterial or mammalian cell cultures did not

show mutagenic effects.

64742-49-0:

Germ cell mutagenicity-

Assessment

Mutagenicity classification not possible from current

data

64742-89-8:

Germ cell mutagenicity-

Assessment

Mutagenicity classification not possible from current

data

68410-97-9:

Genotoxicity in vitro Test Type: Mammalian cell gene mutation assay

Test species: mouse lymphoma cells

Result: positive

Genotoxicity in vivo Test Type: In vivo micronucleus test

Test species: mouse

Method: OECD Test Guideline 474

Result: positive

Germ cell mutagenicity-

Assessment

Positive result(s) from in vivo heritable germ cell mu-

tagenicity tests in mammals

123-86-4:

Genotoxicity in vitro Test Type: Chromosome aberration test in vitro

Test species: Chinese hamster lung fibroblasts Metabolic activation: Without metabolic activation

Method: OECD Test Guideline 473

Result: negative GLP: No data available

Genotoxicity in vivo Test Type: In vivo micronucleus test

Test species: mouse (male and female)

Application Route: Oral

Dose: 500, 1000, 2000 mg/kg bw Method: OECD Test Guideline 474

Result: negative

GLP: yes

Test substance: Information given is based on data

obtained from similar substances.

Germ cell mutagenicity-

Assessment

Tests on bacterial or mammalian cell cultures did not

show mutagenic effects.

142-82-5:

Genotoxicity in vitro Test Type: Chromosome aberration test in vitro

Test species: Rat liver

Metabolic activation: Without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Test Type: Ames test

Metabolic activation: with and without metabolic acti-

vation

Method: OECD Test Guideline 471

Result: negative

Germ cell mutagenicity-

Assessment

Did not show mutagenic effects in animal experi-

ments.

Carcinogenicity

Components:

67-64-1:

Species: mouse, (female)
Application Route: Dermal

Exposure time: 365 d (90%) or 424 d (100%) Dose: 0.1ml 90(71mg) or 100% (79mg) Frequency of Treatment: 3 times per wk

NOAEL: 79

Result: did not display carcinogenic properties

Carcinogenicity - As-

sessment

Carcinogenicity classification not possible from current

data.

108-88-3:

Species: rat, (male and female)
Application Route: inhalation (vapour)

Exposure time: 103 wks Dose: 0, 600, 1200 ppm

Frequency of Treatment: 6.5 h/d, 5 d/wk

NOAEL: No observed adverse effect level: 1,200 ppm

Method: OECD Test Guideline 453

Result: did not display carcinogenic properties

Symptoms: Erosion of nasal epithelium

GLP: yes

Carcinogenicity - As-

Not classifiable as a human carcinogen.

sessment

64742-49-0:

Carcinogenicity - As-

sessment

Not classifiable as a human carcinogen.

64742-89-8:

Carcinogenicity - As-

sessment

Not classifiable as a human carcinogen.

68410-97-9:

Species: mouse

NOAEL: 50 mg/kg bw/day

Method: OECD Test Guideline 451

Result: evidence of carcinogenic activity

Carcinogenicity - As- : Possible human carcinogen

sessment

123-86-4:

Remarks: This information is not available.

Carcinogenicity - As- : No evidence of carcinogenicity in animal studies.

sessment

142-82-5:

Remarks: This information is not available.

Carcinogenicity - As- Carcinogenicity classification not possible from current

sessment data.

Reproductive toxicity

Components:

67-64-1:

Effects on fertility Species: rat, male

Application Route: oral Dose: 0, 5000, 10000 mg/L

Frequency of Treatment: 7 days/week General Toxicity - Parent: LOAEL: 10,000

Fertility: 10,000

Effects on foetal devel-

opment

Species: rat

Application Route: Inhalation Dose: 0, 440, 2200, 11000 ppm

Frequency of Treatment: 7 days/week General Toxicity Maternal: NOAEC: 2,200 ppm

Teratogenicity: NOAEC: 11,000 ppm

Embryo-foetal toxicity.: NOAEC: 2,200 ppm

Method: OECD Test Guideline 414 Result: No teratogenic potential.

GLP: No data available

Reproductive toxicity -

Assessment

No evidence of adverse effects on sexual function and fertility, and on development, based on animal exper-

iments.

108-88-3:

Effects on fertility

Test Type: Two-generation study Species: rat, male and female Application Route: Inhalation Dose: 0, 100, 500, 2000 ppm

Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: 500 ppm General Toxicity F1: NOAEC: 500 ppm

Fertility: NOAEC: 2,000 ppm

Symptoms: Reduced maternal body weight gain. Re-

duced offspring weight gain. Method: OECD Test Guideline 416

Result: Animal testing did not show any effects on

fertility. GLP: yes

Test Type: Fertility

Species: rat, male and female

Application Route: inhalation (vapour)

Dose: 0, 600, 1200 ppm

Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: 600 ppm

Symptoms: Decreased sperm count

Result: Animal testing did not show any effects on

fertility.

Effects on foetal devel- S

Species: rat

Application Route: inhalation (vapour) opment

Dose: 0, 250, 750, 1500, 3000 ppm Duration of Single Treatment: 10 d Frequency of Treatment: 6 hr/day

General Toxicity Maternal: NOAEC: 750 ppm Developmental Toxicity: NOAEC: 750 ppm

Symptoms: Maternal toxicity, Reduced body weight,

Skeletal malformations.

GLP: yes

Reproductive toxicity -

Assessment

Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal

experiments.

64742-49-0:

Reproductive toxicity -

Assessment

Fertility classification not possible from current data. Embryotoxicity classification not possible from current

data.

64742-89-8:

Reproductive toxicity -

Assessment

Fertility classification not possible from current data. Embryotoxicity classification not possible from current

data.

68410-97-9:

Reproductive toxicity -

Assessment

Fertility classification not possible from current data. Embryotoxicity classification not possible from current

data.

123-86-4:

Effects on fertility

Species: rat, male and female Application Route: Inhalation Dose: 0, 750, 1500, 2000 ppm Duration of Single Treatment: 6 h Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: 750 ppm General Toxicity F1: NOAEC: 750 ppm

Fertility: NOAEC: 2,000 ppm

Early Embryonic Development: NOAEC: 750 ppm Symptoms: Effect on reproduction capacity.

Method: OECD Test Guideline 416

GLP: yes

Effects on foetal devel-

opment

Species: rat, male and female Application Route: vapour Dose: 500, 1500, 3000 ppm Duration of Single Treatment: 6 h

Frequency of Treatment: 5 days/week

GLP: yes

Reproductive toxicity -

Fertility classification not possible from current data.

Assessment Embryotoxicity classification not possible from current

data.

142-82-5:

Effects on fertility Test Type: Two-generation study

Species: rat, male and female Application Route: vapour Dose: 0, 900, 3000, 9000 ppm

Frequency of Treatment: 5 days/week General Toxicity - Parent: NOAEC: 3,000 ppm General Toxicity F1: NOAEC: 3,000 ppm

Fertility: NOAEC: 9,000 ppm

Symptoms: Reduced maternal body weight gain. Re-

duced offspring weight gain. Method: OECD Test Guideline 416 Result: No reproductive effects.

GLP: yes

Remarks: Information given is based on data obtained

from similar substances.

Effects on foetal devel-

opment

Species: mouse

Application Route: inhalation (vapour)

Dose: 0, 900, 3000, 9000 ppm Duration of Single Treatment: 10 d Frequency of Treatment: 6 hr/day

General Toxicity Maternal: NOAEC: 900 ppm Developmental Toxicity: NOAEC: 3,000 ppm

Symptoms: Skeletal malformations. Method: OECD Test Guideline 414

GLP: yes

Remarks: Information given is based on data obtained

from similar substances.

Reproductive toxicity -

Assessment

Animal testing did not show any effects on fertility. Embryotoxicity classification not possible from current

data.

STOT - single exposure

Product: No data available

Components:

67-64-1:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous	May cause drowsi-	
	system	ness or dizziness.,	
		The substance or	
		mixture is classified	
		as specific target	
		organ toxicant, sin-	
		gle exposure, cate-	

gory 3 with narcotic effects.

108-88-3:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous system	May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.	

64742-49-0:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous	May cause drowsi-	
	system	ness or dizziness.,	
		The substance or	
		mixture is classified	
		as specific target	
		organ toxicant, sin-	
		gle exposure, cate-	
		gory 3 with narcotic	
		effects.	
		effects.	

64742-89-8:No data available

68410-97-9:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous system	May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.	

123-86-4:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous	May cause drowsi-	
	system	ness or dizziness.,	
		The substance or	

	mixture is classified as specific target organ toxicant, sin- gle exposure, cate-
	gory 3 with narcotic effects.

142-82-5:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous system	May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.	

STOT - repeated exposure

Product:No data available

Components:

67-64-1:No data available

108-88-3:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Auditory system, Eyes	May cause damage to organs through prolonged or repeated exposure., The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.	

64742-49-0:No data available

64742-89-8:No data available

68410-97-9: No data available

123-86-4:No data available

142-82-5: No data available

Repeated dose toxicity

Components:

67-64-1:

Species: mouse, male

NOAEL: 20000

Application Route: Oral Exposure time: 13 wk Number of exposures: daily

Dose: 1250, 2500, 5000, 10000, 20000 Method: OECD Test Guideline 408

GLP: No data available

Species: mouse, female

NOAEL: 20000 LOAEL: 50000

Application Route: Oral Exposure time: 13 wk Number of exposures: daily

Dose: 2500, 5000, 10000, 20000, 5000 Method: OECD Test Guideline 408

GLP: No data available

Repeated dose toxicity - Causes mild skin irritation., Causes serious eye irrita-

Assessment tion.

108-88-3:

Species: rat, male and female

NOAEL: 300

Application Route: inhalation (vapour) Exposure time: 6, 12, or 18 mths Number of exposures: 6 h/d, 5 d/wk

Dose: 0, 30, 100, 300 ppm

Method: OECD Test Guideline 453

Repeated dose toxicity - : Causes skin irritation.

Assessment

64742-89-8:

Species: rat, male and female

NOAEL: 1402

Application Route: inhalation (vapour)

Test atmosphere: vapour Exposure time: 13 weeks

Number of exposures: 6 hours/day, 5 days/week

Dose: 322, 1402, 9869 mg/m3

GLP: yes

Target Organs: Kidney

Symptoms: Nasal and ocular discharge

123-86-4:

Species: rat, male and female

NOAEL: 500

Application Route: inhalation (vapour)

Exposure time: 13 wk

Number of exposures: 6 h/d, 5d/wk

Dose: 500, 1500, 3000 ppm

GLP: yes

Symptoms: oral or nasal discharge

142-82-5:

Species: rat, male NOAEL: 12470 mg/m3

Application Route: inhalation (vapour)

Exposure time: 16 wks

Number of exposures: 12 h/d, 7 d/wk

Dose: 0, 12470 mg/3

Repeated dose toxicity - Causes skin irritation.

Assessment

Aspiration toxicity

Components:

108-88-3:

Aspiration Toxicity - Category 1

64742-49-0:

May be fatal if swallowed and enters airways.

64742-89-8:

May be fatal if swallowed and enters airways.

68410-97-9:

May be fatal if swallowed and enters airways.

142-82-5:

Aspiration Toxicity - Category 1

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

67-64-1:

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): 6,100

mg/l

Exposure time: 48 h

Toxicity to daphnia and

other aquatic inverte-

brates

EC50 (Daphnia magna (Water flea)): 7,630 mg/l

Exposure time: 48 h
Test substance: Acetone

Toxicity to algae Remarks: No data available

108-88-3:

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): 5.5

mg/l

Exposure time: 96 h

Test Type: flow-through test

Toxicity to daphnia and other aquatic inverte-

brates

EC50 (Ceriodaphnia dubia): 3.78 mg/l

Exposure time: 48 h Test Type: Renewal

Toxicity to algae EC50 (Chlorella vulgaris (Fresh water algae)): 134

mg/l

Exposure time: 3 h
Test Type: static test

Toxicity to bacteria IC50 (Bacteria): 84 mg/l

Exposure time: 24 h Test Type: Static

Ecotoxicology Assessment

Acute aquatic toxicity Toxic to aquatic life.

Chronic aquatic toxicity Toxic to aquatic life with long lasting effects.

64742-49-0:

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): 10 mg/l

Exposure time: 96 h

Toxicity to daphnia and other aquatic inverte-

brates

EC50 (Daphnia magna (Water flea)): 4.5 mg/l

Exposure time: 48 h

Toxicity to algae EC50 (Pseudokirchneriella subcapitata (green algae)):

3.71 mg/l

Exposure time: 96 h

Ecotoxicology Assessment

Acute aquatic toxicity

Toxic to aquatic life.

Chronic aquatic toxicity Toxic to aquatic life with long lasting effects.

64742-89-8:

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): 8.2

mg/l

Exposure time: 96 h
Test Type: semi-static test

Toxicity to daphnia and other aquatic inverte-

brates

EC50 (Daphnia magna (Water flea)): 4.5 mg/l

Exposure time: 48 h Test Type: Immobilization Analytical monitoring: yes

Toxicity to algae EC50 (Pseudokirchneriella subcapitata (green algae)):

3.7 mg/l

Exposure time: 96 h Test Type: static test

Ecotoxicology Assessment

Acute aquatic toxicity

Toxic to aquatic life.

Chronic aquatic toxicity Toxic to aquatic life with long lasting effects.

68410-97-9:

Toxicity to fish LC50 (Pimephales promelas (fathead minnow)): 8.2

ma/l

Exposure time: 96 h

Toxicity to daphnia and

other aquatic inverte-

brates

EC50 (Daphnia magna (Water flea)): 4.5 mg/l

Exposure time: 48 h

Toxicity to algae EC50 (Pseudokirchneriella subcapitata (green algae)):

3.1 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Ecotoxicology Assessment

Acute aquatic toxicity

Toxic to aquatic life.

Chronic aquatic toxicity Toxic to aquatic life with long lasting effects.

123-86-4:

Toxicity to fish LC50 (Pimephales promelas (fathead minnow)): 18

mg/

Exposure time: 96 h

Test Type: flow-through test Method: OECD Test Guideline 203

GLP: no

Toxicity to daphnia and other aquatic inverte-

brates

EC50 (Daphnia magna (Water flea)): 44 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to algae EC50 (Desmodesmus subspicatus (green algae)):

674.7 mg/l

End point: Growth rate Exposure time: 72 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) NOEC (Daphnia magna (Water flea)): 23 mg/l

Exposure time: 21 d

Toxicity to bacteria EC 50 (Tetrahymena pyriformis (Ciliate)): 356 mg/l

Exposure time: 40 h Test Type: Static

Ecotoxicology Assessment

Acute aquatic toxicity

Harmful to aquatic life.

Chronic aquatic toxicity Harmful to aquatic life with long lasting effects.

142-82-5:

Toxicity to fish LC50 (Carassius auratus (goldfish)): 4 mg/l

Exposure time: 24 h

Remarks: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Toxicity to daphnia and other aquatic inverte-

other aquatic inverte-

brates

EC50 (Daphnia magna (Water flea)): 1.5 mg/l

Exposure time: 48 h Test Type: static test

Remarks: Very toxic to aquatic organisms.

Toxicity to algae Remarks: No data available

Ecotoxicology Assessment

Acute aquatic toxicity Very toxic to aquatic life.

Chronic aquatic toxicity Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

67-64-1:

Biodegradability Remarks: Readily biodegradable

108-88-3:

Biodegradability Inoculum: Sewage

Biodegradation: 100 %

Remarks: Readily biodegradable

64742-49-0:

Biodegradability aerobic

Inoculum: activated sludge Concentration: 20 mg/l Biodegradation: 74.30 % Exposure time: 56 d

GLP: yes

Remarks: Inherently biodegradable.

64742-89-8:

Biodegradability Concentration: 49.2 mg/l

Result: Readily biodegradable.

Biodegradation: 77 % Testing period: 2 d Exposure time: 28 d

GLP: yes

123-86-4:

Biodegradability Biodegradation: 83 %

Exposure time: 28 d

Method: OECD Test Guideline 301D

Chemical Oxygen De-

mand (COD)

0.00169 mg/g

BOD/COD BOD/COD: 72 %

Theoritical Oxygen De-

mand (ThOD)

 $0.0022 \, \text{mg/g}$

142-82-5:

Biodegradability Primary biodegradation

Inoculum: activated sludge Concentration: 100 mg/l Biodegradation: 100 % Testing period: 2 d Exposure time: 25 d

Remarks: Readily biodegradable

Bioaccumulative potential

Components:

67-64-1:

Partition coefficient: n-

octanol/water

log Pow: -0.24

108-88-3:

Partition coefficient: n-

octanol/water

log Pow: 2.73

64742-49-0:

Partition coefficient: n-

octanol/water

Remarks: No data available

64742-89-8:

Partition coefficient: n-

octanol/water

log Pow: 2.13 - 4.85 (25 °C)

123-86-4:

Bioaccumulation

Species: Fish

Bioconcentration factor (BCF): 15

Partition coefficient: n-

octanol/water

log Pow: 1.82

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection

of Stratospheric Ozone - CAA Section 602 Class I Sub-

stances

Remarks This product neither contains, nor was manufactured

with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A

+ B).

Additional ecological in- An environmental hazard cannot be excluded in the

formation event of unprofessional handling or disposal., Toxic to

aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues Dispose of in accordance with all applicable local,

state and federal regulations.

For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact NEXEO's Environmental Services Group

at 800-637-7922.

Dispose of as unused product. Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty

drum.

SECTION 14. TRANSPORT INFORMATION

IATA (International Air Transport Association): UN1263, PAINT RELATED MATERIAL, 3, II, Flash Point:-18 °C(-0.40 °F)

IMDG (International Maritime Dangerous Goods): UN1263, PAINT RELATED MATERIAL, 3, II

DOT (Department of Transportation): UN1263, PAINT RELATED MATERIAL, 3, II

SECTION 15. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Carcinogen, Moderate skin irritant,

Moderate eye irritant, Teratogen, Reproductive

hazard, Mutagen, Aspiration hazard

WHMIS Classification B2: Flammable liquid

D2A: Very Toxic Material Causing Other Toxic Effects D2B: Toxic Material Causing Other Toxic Effects

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component	Calculated product
Components	10101	Component	carcarated product

		RQ (lbs)	RQ (lbs)
Toluene	108-88-3	1000	4609

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Fire Hazard

Hazards Chronic Health Hazard Acute Health Hazard

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

108-88-3	Toluene	21.6945 %
71-43-2	Benzene	0.0421 %
100-41-4	Ethylbenzene	0.0396 %
110-54-3	Hexane	0.0035 %
67-56-1	Methanol	0.003 %
91-20-3	Naphthalene	0.0003 %
98-82-8	Cumene	0.0001 %

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

67-64-1	Acetone	49.3264 %
108-88-3	Toluene	21.6945 %
123-86-4	n-Butyl acetate	11.003 %
110-82-7	Cyclohexane	0.4498 %
71-43-2	Benzene	0.0421 %
100-41-4	Ethylbenzene	0.0396 %
1330-20-7	Mixed xylenes	0.0233 %
67-56-1	Methanol	0.003 %
98-82-8	Cumene	0.0001 %

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

100 00 3	Talmana	24 (045 0/
108-88-3	Toluene	21.6945 %
123-86-4	n-Butyl acetate	11.003 %
110-82-7	Cyclohexane	0.4498 %
71-43-2	Benzene	0.0421 %
100-41-4	Ethylbenzene	0.0396 %
1330-20-7	Mixed xylenes	0.0233 %
91-20-3	Nanhthalene	0.0003 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

108-88-3	Toluene	21.6945 %
123-86-4	n-Butyl acetate	11.003 %
110-82-7	Cyclohexane	0.4498 %
71-43-2	Benzene	0.0421 %

	Mixe Nap	ed x y lenes	0.0396 % 0.0233 % 0.0003 % er the U.S.	Clean Water
Act Section 307 108-88-3	Tolu	ene 2	21.6945 %	
US State Regulatio	ns			
Massachusetts Rig	ht To Kı	now		
67-64	-1	Acetone		30 - 50 %
108-8	8-3	Toluene		20 - 30 %
123-8	6-4	n-But y l acetate		10 - 20 %
71-43	-2	Benzene		0 - 0.1 %
Pennsylvania Righ	t To Kno	ow .		
67-64	-1	Acetone		30 - 50 %
108-8	8-3	Toluene		20 - 30 %
	2-49-0	Naphtha (pet), hydrotreated lt		0 - 20 %
	2-89-8	Solvent naphtha (pet), lt aliph.		0 - 20 %
68410)-97-9	Distillates, pet, It dist hydrotres process, low-boil	at	0 - 20 %
123-8	6-4	n-Butyl acetate		10 - 20 %
110-8	2-7	Cyclohexane		0.1 - 1 %
71-43	-2	Benzene		0 - 0.1 %
100-4	1-4	Ethylbenzene		0 - 0.1 %
1330-	20-7	Mixed xylenes		0 - 0.1 %
New Jersey Right	To Know	ı		
67-64	-1	Acetone		30 - 50 %
108-8	8-3	Toluene		20 - 30 %
	2-49-0	Naphtha (pet), hydrotreated lt		0 - 20 %
	2-89-8	Solvent naphtha (pet), lt aliph.		0 - 20 %
68410)-97-9	Distillates, pet, It dist hydrotres process, low-boil	at	0 - 20 %
123-8	6-4	n-Butyl acetate		10 - 20 %
California Prop 65		WARNING! This product contai the State of California to cause		cal known to
71-43		Benzene		
100-4		Ethylbenzene		
91-20 98-82		Naphthalene Cumene WARNING: This product contain the State of California to cause reproductive harm.		
108-8		Toluene		
71-43 67-56		Benzene Methanol		

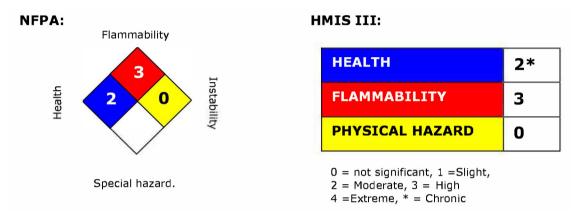
The components of this product are reported in the following inventories:

Switzerland. New notified substances and declared preparations	y (positive listing) (The formulation contains substances listed on the Swiss Inventory)
United States TSCA Inventory	y (positive listing) (On TSCA Invento- ry)
Canadian Domestic Substances List (DSL)	y (positive listing) (All components of this product are on the Canadian DSL.)
Australia Inventory of Chemical Substances (AICS)	y (positive listing) (On the inventory, or in compliance with the inventory)
New Zealand. Inventory of Chemical Substances	n (Negative listing) (Not in compliance with the inventory)
Japan. ENCS - Existing and New Chemical Substances Inventory	n (Negative listing) (Not in compliance with the inventory)
Japan. ISHL - Inventory of Chemical Substances (METI)	n (Negative listing) (Not in compliance with the inventory)
Korea. Korean Existing Chemicals Inventory (KECI)	y (positive listing) (On the inventory, or in compliance with the inventory)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	y (positive listing) (On the inventory, or in compliance with the inventory)
China. Inventory of Existing Chemical Substances in China (IECSC)	y (positive listing) (On the inventory, or in compliance with the inventory)

SECTION 16. OTHER INFORMATION

Version 2.0

Revision Date 07/10/2020



The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

Key or le	gend to abbreviations and acı	ronyms used	l in the safety data sheet
ACGIH	American Conference of Gov-	LD50	Lethal Dose 50%
	ernment Industrial Hygienists		
AICS	Australia, Inventory of Chem-	LOAEL	Lowest Observed Adverse Effect
	ical Substances		Level
DSL	Canada, Domestic Substanc-	NFPA	National Fire Protection Agency
	es List		
NDSL	Canada, Non-Domestic Sub-	NIOSH	National Institute for Occupational
	stances List		Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZloC	New Zealand Inventory of Chemicals
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals

EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure	OSHA	Occupational Safety & Health Admin-
	Scenario Tool		istration
EOSCA	European Oilfield Specialty	PEL	Permissible Exposure Limit
	Chemicals Association		
EINECS	European Inventory of Exist-	PICCS	Philipines Inventory of Commercial
	ing Chemical Substances		Chemical Substances
MAK	Germany Maximum Concen-	PRNT	Presumed Not Toxic
	tration Values		
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reau-
			thorization Act.
IARC	International Agency for Re-	TLV	Threshold Limit Value
	search on Cancer		
IECSC	Inventory of Existing Chemi-	TWA	Time Weighted Average
	cal Substances in China		
ENCS	Japan, Inventory of Existing	TSCA	Toxic Substance Control Act
	and New Chemical Substanc-		
	es		
KECI	Korea, Existing Chemical In-	UVCB	Unknown or Variable Compositon,
	ventory		Complex Reaction Products, and
			Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials In-
			formation System
LC50		Lethal Concentration 50%	