

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 05/06/2020 Version: 1.0

### **SECTION 1: Identification**

1.1. Identification

Product form : Mixture

Product name : WELD-ON® 57 Cleaner

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Cleaning agent
Restrictions on use : Any use not specified

1.3. Supplier

Manufacturer IPS Corporation 17109 South Main Street Gardena, CA 90248-3127 - USA

T 310-898-3300 www.ipscorp.com Supplier IPS Adhesives 600 Ellis Road

Durham, NC 27703 - USA T 1-919-598-2400

1.4. Emergency telephone number

Emergency number : CHEMTEL 800-255-3924 / +1 813-248-0585 (International)

# SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

#### **GHS** classification

Flammable liquids, Category 2 Skin corrosion/irritation, Category 2 Carcinogenicity, Category 2

Specific target organ toxicity — Single exposure, Category 1

Specific target organ toxicity — Single exposure, Category 3,

Respiratory tract irritation

Full text of H statements : see section 16

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H351 Suspected of causing cancer.

H370 Causes damage to organs (kidneys, liver, central nervous system,

retina, optic nerve).

H335 May cause respiratory irritation.

#### 2.2. GHS Label elements, including precautionary statements

#### **GHS-US labelling**

Hazard pictograms (GHS) :







Signal word (GHS) : Danger

Hazard statements (GHS) : H225 - Highly flammable liquid and vapour.

H315 - Causes skin irritation.

H335 - May cause respiratory irritation. H351 - Suspected of causing cancer.

H370 - Causes damage to organs (kidneys, liver, central nervous system, retina, optic nerve).

Precautionary statements (GHS) : 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/spray.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.

P270 - Do not eat, drink or smoke when using this produ P271 - Use only outdoors or in a well-ventilated area.

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

P302+P352 - If on skin: Wash with plenty of water.

05/06/2020 EN (English) Page 1

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.

P307+P311 - If exposed: Call a poison center/doctor.

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

P312 - Call a poison center/doctor if you feel unwell

P321 - Specific treatment (see supplemental first aid instruction on this label).

P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
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.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS\_US)

Not applicable

### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS classification
ethanol	(CAS-No.) 64-17-5	75 - 95	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H335
Methanol	(CAS-No.) 67-56-1	3 - 5	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 STOT SE 1, H370
2-Pentanone, 4-methyl-	(CAS-No.) 108-10-1	1 - 2	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2A, H319 Carc. 2, H351 STOT SE 3, H335
Ethyl acetate	(CAS-No.) 141-78-6	1 - 2	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336

<sup>\*</sup>Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

### **SECTION 4: First-aid measures**

4.4	December	of first of	d
4.1.	Description	of first at	d measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a POISON

CENTER/doctor if you feel unwell.

First-aid measures after skin contact : Wash skin thoroughly with mild soap and water. Take off contaminated clothing and wash it

before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with

water for several minutes. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Get medical advice/attention.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Causes damage to organs (kidneys, liver, central nervous system, retina, optic nerve).

Suspected of causing cancer.

Symptoms/effects after inhalation : May cause respiratory irritation. In case of over-exposure or in confined areas : Dizziness.

Nausea. Headache. Drowsiness. Irritation of the nasal mucous membranes.

Symptoms/effects after skin contact : Causes skin irritation. Repeated or prolonged skin contact may cause dermatitis and defatting.

Symptoms/effects after eye contact : Vapours may cause painful eye irritation. Overexposure may cause : corneal or conjunctival

inflammation.

05/06/2020 EN (English) 2/12

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Symptoms/effects after ingestion : Nausea. Diarrhea. Vomiting. Mental confusion.

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

# **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry powder. Carbon dioxide. alcohol resistant foam.

Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapour. Flammable vapours may accumulate in the container.

Heavier than air, vapours may travel long distances along ground, ignite and flash back to

source. Thermal decomposition may produce: Carbon oxides (CO, CO2).

Explosion hazard : May form flammable/explosive vapour-air mixture. Heat may build pressure, rupturing closed

containers, spreading fire and increasing risk of burns and injuries.

Reactivity : No dangerous reactions known under normal conditions of use.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No

smoking. Avoid contact with skin, eyes and clothing. Do not breathe aerosol. Do not breathe

vapour. Use personal protective equipment as required.

#### 6.1.1. For non-emergency personnel

Protective equipment : Refer to section 8.2.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Refer to section 8.2. Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or

streams

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Use steel container.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Use only non-sparking tools. Avoid contact with skin, eyes and clothing. Use only outdoors or in a well-ventilated area. Do not breathe aerosol. Do

not breathe vapours. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond

container and receiving equipment. Use explosion-proof electrical/ventilating/lighting

equipment.

05/06/2020 EN (English) 3/12

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Storage conditions : Keep only in the original container. Keep in fireproof place. Keep container tightly closed.

Incompatible products : Strong acids. Strong oxidizers. Combustible products. Caustic products.

ammonia. Isocyanates.

Storage temperature : 5 – 43 °C

Heat and ignition sources : Keep away from heat, sparks and flame.

Storage area : Store in dry, cool, well-ventilated area. Store in a dark area.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

ACGIH         Local name         Ethanol           ACGIH         ACGIH TWA (ppm)         1884 mg/m²           ACGIH         ACGIH TWA (ppm)         1000 ppm           ACGIH         ACGIH STEL (ppm)         1000 ppm           ACGIH         Remark (ACGIH)         URT irr           ACGIH         Remark (ACGIH)         URT irr           OSHA         OSHA PEL (TWA) (ppm)         1000 ppm           OSHA         OSHA PEL (TWA) (ppm)         1000 ppm           NIOSH         NIOSH REL (TWA) (ppm)         1000 ppm           NIOSH         NIOSH REL (TWA) (ppm)         1000 ppm           NIOSH         Local name         Methanol           ACGIH         ACGIH TWA (mg/m²)         262 mg/m²           ACGIH         ACGIH TWA (mg/m²)         200 ppm           ACGIH         ACGIH STEL (pgm)         200 ppm           ACGIH         ACGIH STEL (pgm)         250 ppm           ACGIH         ACGIH STEL (pgm²)         250 ppm           ACGIH         ACGIH STEL (pgm²)         260 mg/m²           ACGIH         ACGIH STEL (pgm²)         200 ppm           ACGIH         ACGIH STEL (pgm²)         200 ppm           ACGIH         ACGIH STEL (pgm²)         200 ppm      <	ethanol (64-17-5)			
ACGIH         ACGIH TWA (ppm)         1000 ppm           ACGIH         ACGIH STEL (ppm)         1000 ppm           ACGIH         Remark (ACGIH)         URT irr           OSHA         OSHA PEL (TWA) (mg/m²)         1900 mg/m²           OSHA         OSHA PEL (TWA) (ppm)         1000 ppm           NIOSH         NIOSH REL (TWA) (ppm)         1900 mg/m²           Methanol (87-56-1)         ************************************	ACGIH	Local name	Ethanol	
ACGIH         ACGIH STEL (ppm)         1000 ppm           ACGIH         Remark (ACGIH)         URT irr           OSHA         OSHA PEL (TWA) (ppm)         1900 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         1000 ppm           NIOSH         NIOSH REL (TWA) (ppm)         1900 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         1900 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         1900 ppm           Methanol (87-56-1)         ACGIH         Local name         Methanol           ACGIH         ACGIH TWA (mg/m³)         262 mg/m³           ACGIH         ACGIH TWA (ppm)         200 ppm           ACGIH         ACGIH STEL (mg/m³)         327 mg/m³           ACGIH         ACGIH STEL (mg/m³)         327 mg/m³           ACGIH         ACGIH STEL (mg/m³)         327 mg/m³           ACGIH         Remark (ACGIH)         Headache; eye dam; dizziness; nausea           OSHA         DSHA PEL (TWA) (mg/m³)         260 mg/m³           OSHA         DSHA PEL (TWA) (mg/m³)         260 mg/m³           OSHA         DSHA REL (TWA) (mg/m³)         280 mg/m³           NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg/m³           NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg	ACGIH	ACGIH TWA (mg/m³)	1884 mg/m³	
ACGIH         Remark (ACGIH)         URT irr           OSHA         OSHA PEL (TWA) (mg/m²)         1900 mg/m³           OSHA         OSHA PEL (TWA) (mg/m²)         1000 ppm           NIOSH         NIOSH REL (TWA) (mg/m²)         1900 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         1000 ppm           Methanol (67-56-1) <td a="" constru<="" construction="" of="" rows="" td="" the=""><td>ACGIH</td><td>ACGIH TWA (ppm)</td><td>1000 ppm</td></td>	<td>ACGIH</td> <td>ACGIH TWA (ppm)</td> <td>1000 ppm</td>	ACGIH	ACGIH TWA (ppm)	1000 ppm
OSHA         OSHA PEL (TWA) (mg/m³)         1900 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         1000 ppm           NIOSH         NIOSH REL (TWA) (mg/m³)         1900 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         1900 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         1900 mg/m³           NIOSH REL (TWA) (ppm)         1000 ppm           Methanol (67-56-1)         ACGIH         Local name         Methanol           ACGIH         ACGIH TWA (mg/m²)         262 mg/m³           ACGIH         ACGIH TWA (ppm)         200 ppm           ACGIH         ACGIH STEL (mg/m²)         327 mg/m³           ACGIH         ACGIH STEL (ppm)         250 ppm           ACGIH         ACGIH STEL (ppm)         250 ppm           ACGIH         Remark (ACGIH)         Headache; eye dam; dizziness; nausea           OSHA         OSHA PEL (TWA) (mg/m²)         260 mg/m³           NIOSH         NIOSH PEL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (STEL) (mg/m²)         325 mg/m²           NIOSH REL (STEL) (mg/m²)         325 mg/m²           NIOSH REL (TWA) (mg/m²)         1440 mg/m³           ACGIH	ACGIH	ACGIH STEL (ppm)	1000 ppm	
OSHA         OSHA PEL (TWA) (ppm)         1000 ppm           NIOSH         NIOSH REL (TWA) (mg/m²)         1900 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         1000 ppm           Methanol (67-56-1)           ACGIH         Local name         Methanol           ACGIH         ACGIH TWA (mg/m²)         262 mg/m²           ACGIH         ACGIH TWA (ppm)         200 ppm           ACGIH         ACGIH STEL (mg/m²)         327 mg/m²           ACGIH         ACGIH STEL (ppm)         250 ppm           ACGIH         Remark (ACGIH)         Headache; eye dam; dizziness; nausea           OSHA         OSHA PEL (TWA) (mg/m²)         260 mg/m²           OSHA         OSHA PEL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (STEL) (mg/m²)         325 mg/m²           NIOSH         NIOSH REL (STEL) (ppm)         250 ppm           BIOSH         NIOSH REL (STEL) (ppm)         325 mg/m²           NIOSH         NIOSH REL (STEL) (ppm)         250 ppm           BEthyl acetate (141-78-0)         1440 mg/m²           ACGIH         ACGIH TWA (mg/m²)         1440 mg/m²           ACGIH         ACGIH TWA (ppm) </td <td>ACGIH</td> <td>Remark (ACGIH)</td> <td>URT irr</td>	ACGIH	Remark (ACGIH)	URT irr	
NIOSH         NIOSH REL (TWA) (mg/m²)         1900 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         1000 ppm           Methanol (67-56-1)         ACGIH         Local name         Methanol           ACGIH         ACGIH TWA (mg/m³)         262 mg/m³           ACGIH         ACGIH TWA (ppm)         200 ppm           ACGIH         ACGIH STEL (mg/m³)         327 mg/m³           ACGIH         ACGIH STEL (ppm)         250 ppm           ACGIH         Remark (ACGIH)         Headache; eye dam; dizziness; nausea           OSHA         OSHA PEL (TWA) (mg/m³)         260 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg/m³           NIOSH         NIOSH REL (STEL) (mg/m³)         400 ppm           Ethyl acetate (141-78-6)         4CGIH         4CGIH         4CGIH         4CGIH         4CGIH         4CGIH         4CGIH         400 ppm           ACGIH	OSHA	OSHA PEL (TWA) (mg/m³)	1900 mg/m³	
NIOSH         NIOSH REL (TWA) (ppm)         1000 ppm           Methanol (67-56-1)           ACGIH         Local name         Methanol           ACGIH         ACGIH TWA (mg/m³)         262 mg/m³           ACGIH         ACGIH TWA (ppm)         200 ppm           ACGIH         ACGIH STEL (mg/m³)         327 mg/m³           ACGIH         ACGIH STEL (ppm)         250 ppm           ACGIH         Remark (ACGIH)         Headache; eye dam; dizziness; nausea           OSHA         OSHA PEL (TWA) (mg/m³)         260 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (TWA) (mg/m³)         260 mg/m³           NIOSH         NIOSH REL (STEL) (ppm)         200 ppm           NIOSH         NIOSH REL (STEL) (ppm)         250 ppm           Ethyl acetate (141-78-6)         250 ppm           ACGIH         Local name         Ethyl acetate           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         Remark (ACGIH)         TLV® Basis: URT & eye irr           ACGIH         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 m	OSHA	OSHA PEL (TWA) (ppm)	1000 ppm	
Methanol (67-56-1)         ACGIH         Local name         Methanol           ACGIH         ACGIH TWA (mg/m³)         262 mg/m³           ACGIH         ACGIH TWA (ppm)         200 ppm           ACGIH         ACGIH STEL (mg/m³)         327 mg/m³           ACGIH         ACGIH STEL (ppm)         250 ppm           ACGIH         ACGIH STEL (ppm)         250 ppm           ACGIH         ACGIH STEL (ppm)         250 ppm           ACGIH         Remark (ACGIH)         Headache; eye dam; dizziness; nausea           OSHA         OSHA PEL (TWA) (mg/m³)         260 mg/m³           OSHA         OSHA PEL (TWA) (mg/m³)         260 mg/m³           OSHA         OSHA PEL (TWA) (mg/m³)         260 mg/m³           NIOSH         NIOSH REL (TWA) (mg/m³)         260 mg/m³           NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg/m³           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         Regulatory reference         AC	NIOSH	NIOSH REL (TWA) (mg/m³)	1900 mg/m³	
ACGIH         Local name         Methanol           ACGIH         ACGIH TWA (mg/m³)         262 mg/m³           ACGIH         ACGIH TWA (ppm)         200 ppm           ACGIH         ACGIH STEL (mg/m³)         327 mg/m³           ACGIH         ACGIH STEL (ppm)         250 ppm           ACGIH         ACGIH STEL (ppm)         250 ppm           ACGIH         Remark (ACGIH)         Headache; eye dam; dizziness; nausea           OSHA         OSHA PEL (TWA) (mg/m³)         260 mg/m³           OSHA         OSHA PEL (TWA) (mg/m³)         260 mg/m³           NIOSH         NIOSH REL (TWA) (mg/m³)         260 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg/m³           NIOSH         NIOSH REL (STEL) (ppm)         250 ppm           Ethyl acetate         (141-78-6)           ACGIH         Local name         Ethyl acetate           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (ppm)         400 ppm           ACGIH         Regulatory reference         ACGIH 2020           OSHA         PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         OSHA PEL (TWA) (mg/m	NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm	
ACGIH         ACGIH TWA (mg/m³)         262 mg/m³           ACGIH         ACGIH TWA (ppm)         200 ppm           ACGIH         ACGIH STEL (mg/m³)         327 mg/m³           ACGIH         ACGIH STEL (ppm)         250 ppm           ACGIH         Remark (ACGIH)         Headache; eye dam; dizziness; nausea           OSHA         OSHA PEL (TWA) (mg/m³)         260 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (TWA) (mg/m³)         260 mg/m³           NIOSH         NIOSH REL (TWA) (mg/m³)         260 mg/m³           NIOSH         NIOSH REL (TWA) (mg/m³)         200 ppm           NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg/m³           NIOSH         NIOSH REL (STEL) (ppm)         250 ppm           Ethyl acetate (141-78-6)         250 ppm           Ethyl acetate (141-78-6)         4CGIH (STEL) (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (ppm)         400 ppm           ACGIH         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z	Methanol (67-56-1)			
ACGIH         ACGIH TWA (ppm)         200 ppm           ACGIH         ACGIH STEL (mg/m³)         327 mg/m³           ACGIH         ACGIH STEL (ppm)         250 ppm           ACGIH         Remark (ACGIH)         Headache; eye dam; dizziness; nausea           OSHA         OSHA PEL (TWA) (mg/m³)         260 mg/m³           OSHA         OSHA PEL (TWA) (mg/m³)         200 ppm           NIOSH         NIOSH REL (TWA) (mg/m³)         260 mg/m³           NIOSH         NIOSH REL (TWA) (mg/m³)         260 mg/m³           NIOSH         NIOSH REL (TWA) (mg/m³)         250 mg/m³           NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg/m³           NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg/m³           NIOSH         NIOSH REL (STEL) (ppm)         250 ppm           Ethyl acetate (141-78-6)           Ethyl acetate (141-78-6)           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (ppm)         400 ppm           ACGIH         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           NIOSH	ACGIH	Local name	Methanol	
ACGIH         ACGIH STEL (mg/m³)         327 mg/m³           ACGIH         ACGIH STEL (ppm)         250 ppm           ACGIH         Remark (ACGIH)         Headache; eye dam; dizziness; nausea           OSHA         OSHA PEL (TWA) (mg/m³)         260 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (TWA) (mg/m³)         260 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg/m³           NIOSH         NIOSH REL (STEL) (ppm)         250 ppm           Ethyl acetate (141-78-6)         400 ppm           ACGIH         Local name         Ethyl acetate           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (mg/m³)         400 ppm           ACGIH         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         400 ppm           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³ <t< td=""><td>ACGIH</td><td>ACGIH TWA (mg/m³)</td><td>262 mg/m³</td></t<>	ACGIH	ACGIH TWA (mg/m³)	262 mg/m³	
ACGIH         ACGIH STEL (ppm)         250 ppm           ACGIH         Remark (ACGIH)         Headache; eye dam; dizziness; nausea           OSHA         OSHA PEL (TWA) (mg/m³)         260 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (TWA) (mg/m³)         260 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg/m³           NIOSH         NIOSH REL (STEL) (ppm)         250 ppm           Ethyl acetate (141-78-6)         400 ppm           ACGIH         Local name         Ethyl acetate           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (ppm)         400 ppm           ACGIH         Regulatory reference         ACGIH 2020           OSHA         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         400 ppm           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         400 ppm  <	ACGIH	ACGIH TWA (ppm)	200 ppm	
ACGIH         Remark (ACGIH)         Headache; eye dam; dizziness; nausea           OSHA         OSHA PEL (TWA) (mg/m³)         260 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (TWA) (mg/m³)         260 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg/m³           NIOSH         NIOSH REL (STEL) (ppm)         250 ppm           Ethyl acetate (141-78-6)           ACGIH         Local name         Ethyl acetate           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (ppm)         400 ppm           ACGIH         Remark (ACGIH)         TLV® Basis: URT & eye irr           ACGIH         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         400 ppm	ACGIH	ACGIH STEL (mg/m³)	327 mg/m³	
OSHA         OSHA PEL (TWA) (mg/m³)         260 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (TWA) (mg/m³)         260 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg/m³           NIOSH         NIOSH REL (STEL) (ppm)         250 ppm           Ethyl acetate (141-78-6)         Echyl acetate (141-78-6)           ACGIH         Local name         Ethyl acetate           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (ppm)         400 ppm           ACGIH         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         400 ppm           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         400 ppm	ACGIH	ACGIH STEL (ppm)	250 ppm	
OSHA         OSHA PEL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (TWA) (mg/m³)         260 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg/m³           NIOSH         NIOSH REL (STEL) (ppm)         250 ppm           Ethyl acetate (141-78-6)           ACGIH         Local name         Ethyl acetate           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (ppm)         400 ppm           ACGIH         Remark (ACGIH)         TLV® Basis: URT & eye irr           ACGIH         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         400 ppm           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         Methyl isobutyl ketone	ACGIH	Remark (ACGIH)	Headache; eye dam; dizziness; nausea	
NIOSH         NIOSH REL (TWA) (mg/m³)         260 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg/m³           NIOSH         NIOSH REL (STEL) (ppm)         250 ppm           Ethyl acetate (141-78-6)           ACGIH         Local name         Ethyl acetate           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (ppm)         400 ppm           ACGIH         Remark (ACGIH)         TLV® Basis: URT & eye irr           ACGIH         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         400 ppm           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         Methyl isobutyl ketone	OSHA	OSHA PEL (TWA) (mg/m³)	260 mg/m³	
NIOSH         NIOSH REL (TWA) (ppm)         200 ppm           NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg/m³           NIOSH         NIOSH REL (STEL) (ppm)         250 ppm           Ethyl acetate (141-78-6)           ACGIH         Local name         Ethyl acetate           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (ppm)         400 ppm           ACGIH         Remark (ACGIH)         TLV® Basis: URT & eye irr           ACGIH         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         400 ppm           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         Methyl isobutyl ketone	OSHA	OSHA PEL (TWA) (ppm)	200 ppm	
NIOSH         NIOSH REL (STEL) (mg/m³)         325 mg/m³           NIOSH         NIOSH REL (STEL) (ppm)         250 ppm           Ethyl acetate (141-78-6)         Ethyl acetate           ACGIH         Local name         Ethyl acetate           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (ppm)         400 ppm           ACGIH         Remark (ACGIH)         TLV® Basis: URT & eye irr           ACGIH         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         400 ppm           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         Methyl isobutyl ketone	NIOSH	NIOSH REL (TWA) (mg/m³)	260 mg/m³	
NIOSH         NIOSH REL (STEL) (ppm)         250 ppm           Ethyl acetate (141-78-6)         Ethyl acetate           ACGIH         Local name         Ethyl acetate           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (ppm)         400 ppm           ACGIH         Remark (ACGIH)         TLV® Basis: URT & eye irr           ACGIH         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         400 ppm           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         Methyl isobutyl ketone	NIOSH	NIOSH REL (TWA) (ppm)	200 ppm	
Ethyl acetate (141-78-6)           ACGIH         Local name         Ethyl acetate           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (ppm)         400 ppm           ACGIH         Remark (ACGIH)         TLV® Basis: URT & eye irr           ACGIH         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         400 ppm           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         ACGIH         Methyl isobutyl ketone	NIOSH	NIOSH REL (STEL) (mg/m³)	325 mg/m <sup>3</sup>	
ACGIH         Local name         Ethyl acetate           ACGIH         ACGIH TWA (mg/m³)         1440 mg/m³           ACGIH         ACGIH TWA (ppm)         400 ppm           ACGIH         Remark (ACGIH)         TLV® Basis: URT & eye irr           ACGIH         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         400 ppm           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         ACGIH         Methyl isobutyl ketone	NIOSH	NIOSH REL (STEL) (ppm)	250 ppm	
ACGIH ACGIH TWA (mg/m³) 1440 mg/m³  ACGIH ACGIH TWA (ppm) 400 ppm  ACGIH Remark (ACGIH) TLV® Basis: URT & eye irr  ACGIH Regulatory reference ACGIH 2020  OSHA OSHA PEL (TWA) (mg/m³) 1400 mg/m³  OSHA OSHA PEL (TWA) (ppm) 400 ppm  OSHA Regulatory reference (US-OSHA) OSHA Annotated Table Z-1  NIOSH NIOSH REL (TWA) (mg/m³) 1400 mg/m³  NIOSH NIOSH REL (TWA) (ppm) 400 ppm  2-Pentanone, 4-methyl- (108-10-1)  ACGIH Local name Methyl isobutyl ketone	Ethyl acetate (141-78-6)			
ACGIH       ACGIH TWA (ppm)       400 ppm         ACGIH       Remark (ACGIH)       TLV® Basis: URT & eye irr         ACGIH       Regulatory reference       ACGIH 2020         OSHA       OSHA PEL (TWA) (mg/m³)       1400 mg/m³         OSHA       OSHA PEL (TWA) (ppm)       400 ppm         OSHA       Regulatory reference (US-OSHA)       OSHA Annotated Table Z-1         NIOSH       NIOSH REL (TWA) (mg/m³)       1400 mg/m³         NIOSH       NIOSH REL (TWA) (ppm)       400 ppm            2-Pentanone, 4-methyl- (108-10-1)         ACGIH       Local name       Methyl isobutyl ketone	ACGIH	Local name	Ethyl acetate	
ACGIH         Remark (ACGIH)         TLV® Basis: URT & eye irr           ACGIH         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         400 ppm           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         Methyl isobutyl ketone	ACGIH	ACGIH TWA (mg/m³)	1440 mg/m³	
ACGIH         Regulatory reference         ACGIH 2020           OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         400 ppm           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)           ACGIH         Local name         Methyl isobutyl ketone	ACGIH	ACGIH TWA (ppm)	400 ppm	
OSHA         OSHA PEL (TWA) (mg/m³)         1400 mg/m³           OSHA         OSHA PEL (TWA) (ppm)         400 ppm           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         ACGIH         Local name           Methyl isobutyl ketone	ACGIH	Remark (ACGIH)	TLV® Basis: URT & eye irr	
OSHA         OSHA PEL (TWA) (ppm)         400 ppm           OSHA         Regulatory reference (US-OSHA)         OSHA Annotated Table Z-1           NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         ACGIH         Local name           Methyl isobutyl ketone	ACGIH	Regulatory reference	ACGIH 2020	
OSHA Regulatory reference (US-OSHA) OSHA Annotated Table Z-1  NIOSH NIOSH REL (TWA) (mg/m³) 1400 mg/m³  NIOSH NIOSH REL (TWA) (ppm) 400 ppm  2-Pentanone, 4-methyl- (108-10-1)  ACGIH Local name Methyl isobutyl ketone	OSHA	OSHA PEL (TWA) (mg/m³)	1400 mg/m³	
NIOSH         NIOSH REL (TWA) (mg/m³)         1400 mg/m³           NIOSH         NIOSH REL (TWA) (ppm)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)           ACGIH         Local name         Methyl isobutyl ketone	OSHA	OSHA PEL (TWA) (ppm)	400 ppm	
NIOSH         NIOSH REL (TWA) (ppm)         400 ppm           2-Pentanone, 4-methyl- (108-10-1)         ACGIH         Local name         Methyl isobutyl ketone	OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1	
2-Pentanone, 4-methyl- (108-10-1)  ACGIH Local name Methyl isobutyl ketone	NIOSH	NIOSH REL (TWA) (mg/m³)	1400 mg/m³	
ACGIH Local name Methyl isobutyl ketone	NIOSH	NIOSH REL (TWA) (ppm)	400 ppm	
	2-Pentanone, 4-methyl- (108	-10-1)		
ACGIH ACGIH TWA (mg/m³) 205 mg/m³	ACGIH	Local name	Methyl isobutyl ketone	
	ACGIH	ACGIH TWA (mg/m³)	205 mg/m³	

05/06/2020 EN (English) 4/12

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2-Pentanone, 4-methyl- (108-10-1)		
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	ACGIH STEL (mg/m³)	307 mg/m³
ACGIH	ACGIH STEL (ppm)	75 ppm
ACGIH	Remark (ACGIH)	URT irr; dizziness; headache
OSHA	OSHA PEL (TWA) (mg/m³)	410 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
NIOSH	NIOSH REL (TWA) (mg/m³)	205 mg/m³
NIOSH	NIOSH REL (TWA) (ppm)	50 ppm
NIOSH	NIOSH REL (STEL) (mg/m³)	300 mg/m³
NIOSH	NIOSH REL (STEL) (ppm)	75 ppm

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Avoid creating mist or spray. Avoid splashing. Emergency eye wash fountains and safety

showers should be available in the immediate vicinity of any potential exposure. Ensure good

ventilation of the work station. Provide local exhaust or general room ventilation.

Environmental exposure controls : Prevent leakage or spillage.

#### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Avoid all unnecessary exposure.

#### Hand protection:

Wear suitable gloves resistant to chemical penetration. Butyl rubber gloves

### Eye protection:

Chemical goggles. If there is a risk of liquid being splashed: face shield

#### Skin and body protection:

Skin protection appropriate to the conditions of use should be provided. Foot protection. Lab coat. Rubber Apron. Tyvek® Gown/Coveralls

#### Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Approved organic vapour respirator. Appropriate dust or mist respirator should be used if airborne particles are generated when handling this material. In confined space use self-contained breathing apparatus

#### Other information:

Do not eat, drink or smoke during use.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state: LiquidAppearance: Clear. Thin.Colour: BlueOdour: alcoholOdour threshold: 100 ppm

pH : No data available
Melting point : No data available
Freezing point : No data available

Boiling point :  $78 \, ^{\circ}\text{C}$ Flash point :  $13.8 \, ^{\circ}\text{C}$ Relative evaporation rate (butylacetate=1) :  $\sim 1.7$ 

Flammability (solid, gas) : Highly flammable liquid and vapour.

Vapour pressure : 46 mm Hg @ 20 °C

Relative vapour density at 20 °C : 1.6

05/06/2020 EN (English) 5/12

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Relative density : 0.81 @ 23 °C

Density : 6.75 lb/gal

Solubility : No data available

Log Pow : No data available

Auto-ignition temperature : 363 °C

Decomposition temperature : No data available Viscosity, kinematic : No data available Viscosity, dynamic : No data available

Explosive limits : Lower explosive limit (LEL): 3.3 vol %

Upper explosive limit (UEL): 19 vol %

Explosive properties : No data available
Oxidising properties : No data available

#### 9.2. Other information

No additional information available

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

#### 10.5. Incompatible materials

Strong bases. Strong acids. Strong oxidizers. Caustic products. ammonia. Isocyanates. combustible materials.

#### 10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. May release flammable gases.

### **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

ethanol (64-17-5)	
LD50 oral rat	7060 mg/kg
LC50 inhalation rat (ppm)	20000 ppm 10 h
ATE (oral)	7060 mg/kg bodyweight

Methanol (67-56-1)		
ATE (oral)	100 mg/kg bodyweight	
ATE (dermal)	300 mg/kg bodyweight	
ATE (dust.mist)	0.5 mg/l/4h	

Ethyl acetate (141-78-6)	
LD50 oral rat	4934 mg/kg
LD50 dermal rabbit	> 20000 mg/kg
LC50 inhalation rat (mg/l)	> 18 mg/l/4h
ATE (oral)	4934 mg/kg bodyweight

2-Pentanone, 4-methyl- (108-10-1)	
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (ppm)	2000 (2000 – 4000) ppm/4h
ATE (gases)	2000 ppmv/4h
ATE (vapours)	11 mg/l/4h

05/06/2020 EN (English) 6/12

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2-Pentanone, 4-methyl- (108-10-1)	
ATE (dust,mist)	1.5 mg/l/4h
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.
ethanol (64-17-5)	
IARC group	1 - Carcinogenic to humans
2-Pentanone, 4-methyl- (108-10-1)	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: Not classified
STOT-single exposure	: Causes damage to organs (kidneys, liver, central nervous system, retina, optic nerve). May cause respiratory irritation.
ethanol (64-17-5)	
STOT-single exposure	May cause respiratory irritation.
Methanol (67-56-1)	
STOT-single exposure	Causes damage to organs.
Ethyl acetate (141-78-6)	
STOT-single exposure	May cause drowsiness or dizziness.
2-Pentanone, 4-methyl- (108-10-1)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Ethyl acetate (141-78-6)	
NOAEL (subchronic, oral, animal/male, 90 days)	900 mg/kg bodyweight
NOAEL (subchronic, oral, animal/female, 90 days)	900 mg/kg bodyweight
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Likely routes of exposure	: Inhalation. Skin and eye contact.
Symptoms/effects	: Causes damage to organs (kidneys, liver, central nervous system, retina, optic nerve). Suspected of causing cancer.
Symptoms/effects after inhalation	: May cause respiratory irritation. In case of over-exposure or in confined areas : Dizziness. Nausea. Headache. Drowsiness. Irritation of the nasal mucous membranes.
Symptoms/effects after skin contact	: Causes skin irritation. Repeated or prolonged skin contact may cause dermatitis and defatting.
Symptoms/effects after eye contact	: Vapours may cause painful eye irritation. Overexposure may cause : corneal or conjunctival inflammation.
Symptoms/effects after ingestion	: Nausea. Diarrhea. Vomiting. Mental confusion.

# **SECTION 12: Ecological information**

Ecology - water : Harmful to aquatic life with long lasting effects.

ethanol (64-17-5)	
LC50 fish 1	> 10000 mg/l Oncorhynchus mykiss
LC50 fish 2	> 13400 mg/l Pimephales promelas
Ethyl acetate (141-78-6)	
LC50 fish 1	220 mg/l
EC50 crustacea	1200 mg/l
NOEC chronic fish	< 9.35 mg/l

05/06/2020 EN (English) 7/12

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2-Pentanone, 4-methyl- (108-10-1)		
LC50 fish 1	> 179 96 h	
EC50 crustacea	> 200 48 h	

### 12.2. Persistence and degradability

WELD-ON® 57 Cleaner			
Persistence and degradability	May cause long-term adverse effects in the environment.		
ethanol (64-17-5)			
Persistence and degradability	Readily biodegradable.		
Ethyl acetate (141-78-6)			
Persistence and degradability	Readily biodegradable.		
2-Pentanone, 4-methyl- (108-10-1)	2-Pentanone, 4-methyl- (108-10-1)		
Persistence and degradability	Readily biodegradable.		

#### 12.3. Bioaccumulative potential

WELD-ON® 57 Cleaner		
Bioaccumulative potential	Not established.	
ethanol (64-17-5)		
Bioaccumulative potential	Not expected to bioaccumulate.	
Ethyl acetate (141-78-6)		
Bioaccumulative potential	Not expected to bioaccumulate.	
2-Pentanone, 4-methyl- (108-10-1)		
Log Pow	1.9	

### 12.4. Mobility in soil

WELD-ON® 57 Cleaner	
Ecology - soil	Not established.

#### 12.5. Other adverse effects

Other information : Avoid release to the environment.

# **SECTION 13: Disposal considerations**

### 13.1. Disposal methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Avoid release to the environment.

### **SECTION 14: Transport information**

#### **Department of Transportation (DOT)**

In accordance with DOT

Transport document description : UN1987 Alcohols, n.o.s. (Ethanol, Methanol), 3, II

UN-No.(DOT) : UN1987
Proper Shipping Name (DOT) : Alcohols, n.o.s.
Ethanol, Methanol

Transport hazard class(es) (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : II - Medium Danger Hazard labels (DOT) : 3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

05/06/2020 EN (English) 8/12

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT Packaging Bulk (49 CFR 173.xxx)

: 242

DOT Special Provisions (49 CFR 172.102)

: 172 - This entry includes alcohol mixtures containing up to 5% petroleum products. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110

kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

T7 - 4 178.274(d)(2) Normal...... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / (1 + a (tr - tf)) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during

filling.

TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when

the flash point of the hazardous material transported is greater than 0 C (32 F).

TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the

MAWP. : 4b, 150

DOT Packaging Exceptions (49 CFR 173.xxx)

(49 CFR 173.27)

DOT Quantity Limitations Passenger aircraft/rail : 5 L

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

**DOT Vessel Stowage Location** 

: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded.

Emergency Response Guide (ERG) Number

Other information

: No supplementary information available.

#### Transport by sea

Transport document description (IMDG) : UN 1987 ALCOHOLS, N.O.S. (Ethanol, Methanol), 3, II

UN-No. (IMDG) : 1987

Proper Shipping Name (IMDG) : ALCOHOLS, N.O.S. Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : II - substances presenting medium danger

Limited quantities (IMDG) : 1 L

#### Air transport

Transport document description (IATA) : UN 1987 Alcohols, n.o.s. (Ethanol, Methanol), 3, II

UN-No. (IATA) : 1987

Proper Shipping Name (IATA) : Alcohols, n.o.s. Class (IATA) : 3 - Flammable Liquids Packing group (IATA) : II - Medium Danger

# **SECTION 15: Regulatory information**

# 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Methanol (67-56-1)		
Subject to reporting requirements of United	States SARA Section 313	
Listed on EPA Hazardous Air Pollutant (HA	PS)	
CERCLA RQ	CERCLA RQ 5000 lb	
Ethyl acetate (141-78-6)		
CERCLA RQ	5000 lb	
2-Pentanone, 4-methyl- (108-10-1)		
Subject to reporting requirements of United	States SARA Section 313	
CERCLA RQ	CERCLA RQ 5000 lb	

05/06/2020 EN (English) 9/12

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 15.2. International regulations

#### **CANADA**

#### ethanol (64-17-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

#### Methanol (67-56-1)

Listed on the Canadian DSL (Domestic Substances List) inventory.

#### Ethyl acetate (141-78-6)

Listed on the Canadian DSL (Domestic Substances List) inventory.

#### 2-Pentanone, 4-methyl- (108-10-1)

Listed on the Canadian DSL (Domestic Substances List) inventory.

#### **EU-Regulations**

No additional information available

#### Methanol (67-56-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### Ethyl acetate (141-78-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### 2-Pentanone, 4-methyl- (108-10-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### National regulations

#### ethanol (64-17-5)

Listed on IARC (International Agency for Research on Cancer)

#### Methanol (67-56-1)

Listed on the Inventory of Existing Chemical Substances Produced or Imported in China (IECSC).

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on Taiwan National Chemical Inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on Chinese List of Hazardous Chemicals for Priority Management-SAWS

Listed on the Chinese Catalog of Hazardous Chemicals.

#### Ethyl acetate (141-78-6)

Listed on the AICS (Australian Inventory of Chemical Substances)

#### 2-Pentanone, 4-methyl- (108-10-1)

Listed on IARC (International Agency for Research on Cancer)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on Taiwan National Chemical Inventory

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Chinese Catalog of Hazardous Chemicals.

Listed on the Inventory of Existing Chemical Substances Produced or Imported in China (IECSC).

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

#### 15.3. US State regulations



This product can expose you to 2-Pentanone, 4-methyl-, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	Carcinogenicity	Developmental toxicity	Reproductive toxicity male	Reproductive toxicity female	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Methanol(67-56-1)		X				47000 μg/day (inhalation); 23,000 μg/day (oral)
2-Pentanone, 4- methyl-(108-10-1)	Х	Х				

05/06/2020 EN (English) 10/12

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Component	Carcinogenicity	Developmental toxicity	Reproductive toxicity male	Reproductive toxicity female	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
ethylbenzene(100-41- 4)	Х				54 μg/day (inhalation); 41 μg/day (oral)	
Benzene(71-43-2)	X	X	X		6.4 μg/day (oral); 13 μg/day (inhalation)	24 μg/day (oral); 49 μg/day (inhalation)
Toluene(108-88-3)		X				7000 μg/day
acetaldehyde; ethanal(75-07-0)	X				90 µg/day (inhalation)	

Component	State or local regulations
ethanol(64-17-5)	U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S New Jersey - Right to Know Hazardous Substance List; U.S New York - Reporting of Releases Part 597 - List of Hazardous Substances
Methanol(67-56-1)	U.S Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List
Ethyl acetate(141-78-6)	U.S Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S New Jersey - Right to Know Hazardous Substance List; U.S New York - Reporting of Releases Part 597 - List of Hazardous Substances; U.S Pennsylvania - RTK (Right to Know) List
2-Pentanone, 4-methyl-(108-10-1)	U.S Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S New Jersey - Right to Know Hazardous Substance List; U.S New York - Reporting of Releases Part 597 - List of Hazardous Substances; U.S Pennsylvania - RTK (Right to Know) List

#### **SECTION 16: Other information**

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Data sources

: National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition. ACGIH (American Conference of Government Industrial Hygienists). European Standards: Personal Protective Equipment; accessed at:

http://ec.europa.eu/enterprise/policies/european-standards/harmonised-standards/personal-protective-equipment/index\_en.htm. OSHA 29CFR 1910.1200 Hazard Communication Standard. Chemical Inspection & Regulation Service; accessed at: http://www.cirs-reach.com/Inventory/Global\_Chemical\_Inventories.html. Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition. European Chemicals Agency (ECHA) Registered Substances list. Accessed at http://echa.europa.eu/. Manufacturer Information. European Chemicals Agency (ECHA) C&L Inventory database. Accessed at http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database. TSCA Chemical Substance Inventory. Accessed at

http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

#### Full text of H-statements:

H225	Highly flammable liquid and vapour.	
H301	Toxic if swallowed.	
H311	Toxic in contact with skin.	
H315	Causes skin irritation.	

05/06/2020 EN (English) 11/12

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H370	Causes damage to organs.

#### Abbreviations and acronyms:

	ACGIH (American Conference of Government Industrial Hygienists)		
	ATE: Acute Toxicity Estimate		
	CAS (Chemical Abstracts Service) number		
	CLP: Classification, Labelling, Packaging.		
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals		
	LD50: Lethal Dose for 50% of the test population		
LC50	Median lethal concentration		
	TWA: Time Weighted Average		
	STEL: Short Term Exposure Limits		
VOC	Volatile Organic Compounds		

NFPA health hazard

: 2 - Materials that, under emergency conditions, can cause

temporary incapacitation or residual injury.

NFPA fire hazard

: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient

temperature conditions.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions,

and not reactive with water.



SDS Prepared by: The Redstone Group, dba SafeBridge Consultants, Inc.

110 Polaris Pkwy Suite 200

Westerville, OH USA 43082 P: +1 (614) 923-7472 www.redstonegrp.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

05/06/2020 EN (English) 12/12